

BROOME COMMUNITY COLLEGE

CATALOG 1987-88

ACCREDITATION

Broome Community College is a member of the Middle States Association of Colleges and Schools.

The College is supervised by the State University of New York and its curriculums are registered by the State Education Department.

The Civil, Chemical, Electrical and Mechanical Engineering Technology programs are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., (TAC/ABET).

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation and by the United States Department of Education, and the Nursing Curriculum is accredited by the National League for Nursing.

The Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association (AMA) has accredited four other curriculums-Radiologic Technology, Medical Record Technology, Medical Laboratory Technology, and Medical Assistant, which is also accredited by the American Association of Medical Assistants.

The Medical Record Technology program has double accreditation, too, having been approved by the American Medical Record Association as well as by AMA. The Medical Laboratory Technology curriculum also has approval by the National Accrediting Agency for Clinical Laboratory Science (NAACLS) in conjunction with AMA. The Dietary program is approved by the Dietary Managers Association.

NON-DISCRIMINATION COMMITMENT

Broome Community College does not discriminate on the basis of race, sex, color, creed, age, national origin, disability, marital status, or status as a disabled veteran or veteran of the Vietnam era in the recruitment of students, the recruitment and employment of faculty and staff, or the operation of any of its programs and activities, as specified by Federal and State Laws and regulations.

The designated coordinator for compliance with Title VI and VII of the Civil Rights Act of 1964, as amended, Title IX of Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, as amended, and Section 402 of the Vietnam Era Veteran's Readjustments Assistance Act of 1974, as amended, is the Affirmative Action/Equal Opportunity Officer.

For further information or questions, contact this individual weekdays, during regular college hours.

THE COLLEGE PHONE NUMBER IS (607) 771-5000.

The College reserves the right at any time to make changes deemed advisable or necessary. The College, moreover, shall not be responsible for any typographical errors contained in this catalog.

For information about the College, its program, and its admissions procedure contact:

Office of Admissions
Broome Community College
P.O. Box 1017
Binghamton, New York 13902
Phone (607) 771-5001

Hearing impaired persons should phone (607) 771-5001 (Voice-TDD/TTY).

PARTNERS IN PROGRESS

Broome Community College

State University of New York (SUNY)

Broome County (College Sponsor)



BROOME COMMUNITY COLLEGE
1987-88
CATALOG

A comprehensive Community College Supervised by SUNY (State University of New York) and sponsored by the County of Broome.

BROOME COMMUNITY COLLEGE P.O. BOX 1017, BINGHAMTON, N.Y. 13902
PHONE (607) 771-5001

47 COLLEGE PROGRAMS OF STUDY

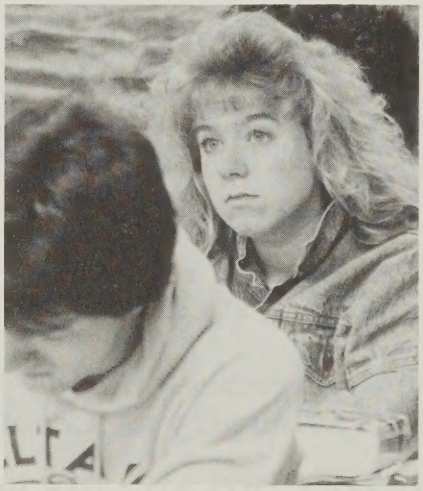
DEGREE-GRANTING CURRICULUMS IN 32 FIELDS OF STUDY

Business and Office Technologies
1-Accounting
2-Business Administration
3-Hotel/Restaurant Technology
4-Management
5-Marketing
6-Travel and Tourism
7-Executive Secretary
8-Word Processing
9-Office Services Assistant

Technology, Engineering and Computing
10-Chemical Engineering Technology
11-Civil Engineering Technology
12-Electrical Engineering Technology
13-Mechanical Engineering Technology
14-Industrial Technology
*15-Engineering Science
*16-Computer Science
17-Data Processing
18-Computer Technology
19-Tool and Die Making

Health Sciences
20-Dental Hygiene
21-Medical Assistant
22-Medical Laboratory Technology
23-Medical Record Technology
24-Nursing
25-Radiologic Technology

Liberal and General Studies
*26-Liberal Arts (Associate in Arts and Associate in Science degrees)
27-Early Childhood
28-Criminal Justice-Police
29-Fire Protection Technology
30-Individual Studies
31-Paralegal Assistant
32-Communications and Media Arts



Unless otherwise indicated, degree programs are occupational in nature and designed to prepare graduates for immediate employment.

* These programs are designed to prepare graduates for transfer to four-year colleges and universities in the third, or junior, year.

CERTIFICATE PROGRAMS IN 16 FIELDS OF STUDY

These programs generally consist of half the number of credits in an associate degree curriculum and are, therefore the equivalent of one year of college study. Most are given in the evening.

Business with emphasis in:
1-Accounting
2-Management
3-Marketing-Sales and Retailing

4-General Office

5-Early Childhood

6-Criminal Justice

7-Dietary Manager

8-Fire Protection Technology

Industrial Technology with emphasis in:
9-Chemical
10-Electrical
11-Mechanical
12-Production Managment

13-Interior Design

14-Liberal Arts

15-Machinist Related Instruction

16-Paralegal Assistant

HOW TO USE THIS CATALOG

To help readers find their way through the pages of this catalog, a few words of explanation may be helpful. The catalog is assembled in essentially five parts, as follows:

PART 1, which consists of pages 1 to 33, contains the policies, procedures and regulations of the College. And as the accompanying table of contents shows, these are divided into such areas as admissions, financial aid, expenses, academic affairs and student affairs.

PART 2, which runs from pages 34 to 66, is a rundown of the College's programs and curriculums, arranged in alphabetical order by Academic Division. It shows the courses taken by students in each semester, along with the number of class hours, laboratory hours and credits for each. A summary of the field for which each curriculum prepares its graduates is also included.

PART 3, from pages 67 to 76, is directed to part-time students. It has academic information for them including a presentation of the programs of study for them for degrees and certificates. It also includes information about the College's Center for Community Education and its non-credit offerings (page 76).

PART 4, covering pages 77 to 119, carries the descriptions of the college's courses. These are arranged in alphabetical order, according to subject matter, starting with Anthropology.

PART 5, which appears on pages 120 to 133, is essentially the listing of the administration and faculty of the College. There is also information about the State University of New York, of which the College is a part.

Attention is also directed to the INDEX on pages 134 to 136. This is an alphabetical listing of the topics covered in the catalog together with the page numbers where one can find them.



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COLLEGE MISSION AND GOALS STATEMENTS

Broome Community College is a public, comprehensive, educational institution providing: (1) arts and sciences transfer degrees, (2) occupational degrees and certificate programs in health, business and technology, (3) developmental learning programs, (4) student and administrative services, and (5) continuing and community programs.

GOALS

1. Access—Broome Community College is a full opportunity college providing opportunities to all students who are seeking access to the College program.

2. Diversity—Broome Community College provides a diverse academic and student development program, supported by appropriate educational and administrative services.

3. Quality—Broome Community College provides quality programs, and utilizes internal and external evaluation processes to preserve and improve program excellence.

4. Community—Broome Community College supports efforts designed to improve economic development and quality of life in the region, the College has a commitment to provide businesses, industries, agencies and other community members with educational courses, training programs and other services as needed.

5. Resources—Broome Community College seeks and acquires the necessary levels of physical, fiscal and human resources requisite to preserve and improve program quality.

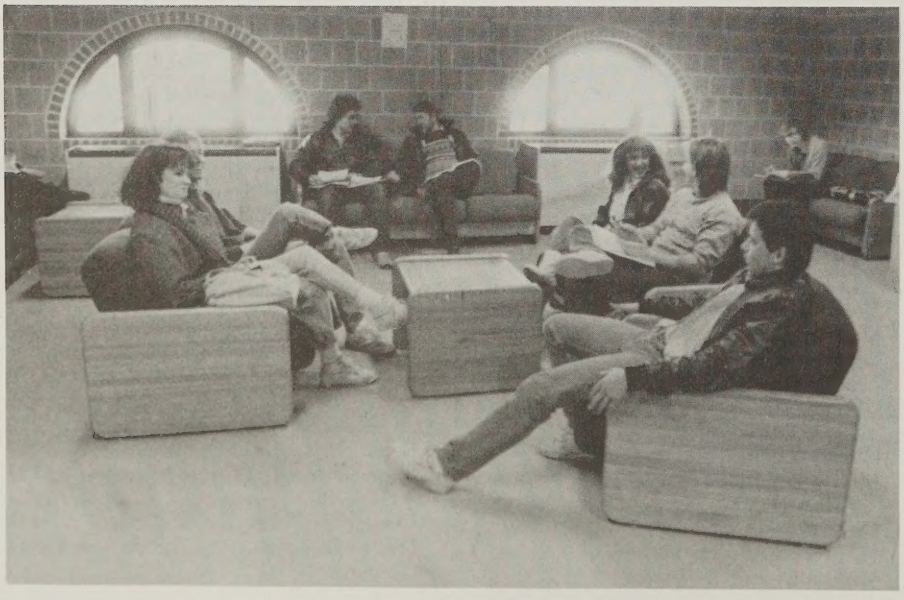
6. Governance—Broome Community College leadership collaborates with the numerous internal and external governance bodies to foster and sustain collegial rapport to ensure responsible decisions and acts.

AUTHORIZATION

Broome County is the sponsor of Broome Community College, which was established in 1946 and is one of the oldest community colleges in the State University of New York (SUNY) system. The College is governed by a Board of Trustees and funded by annual appropriations (operational and capital) from state and county funds, and students pay up to one-third of the college's operating costs through tuition. Five of the trustees are appointed by the County Executive, with approval of the County Legislature, and four by the Governor. County and trustee governance policy and practice are based on a mutually determined modified "Plan C" resolution of County Government.

The College President is appointed by the College Board of Trustees, with approval of the Chancellor of the State University of New York and the SUNY Board of Trustees. His/Her direct supervisor is the chairman of the College Board of Trustees. The SUNY Chancellor provides an umbrella type of leadership to the president through a deputy for community colleges to insure that appropriate SUNY policies and regulations and State Education Department (SED) guidelines for post-secondary institutions are followed.

Degree-granting authority for Broome Community College is given by the Board of Regents of the University of the State of New York, and the College's academic program is accredited by the Middle States Association of Colleges and Schools.



DEFINITION

Since the date of charter in 1946, as the New York State Institute of Applied Arts and Sciences at Binghamton, the College has moved from a limited access technical institute to a comprehensive community college with a Full Opportunity enrollment policy. Broome Community College is organized into three primary divisions: academic, administrative, and student services, each of which is administered by a Vice President reporting to the College President.

The Board of Trustees establishes College policy, and the Administration interprets and implements it, working in conjunction with the Sponsor, State University of New York (SUNY), the State Education Department (SED), and the various accrediting bodies that evaluate and make recommendations on the objectives and outcomes of the College program.

Broome Community College emphasizes classroom and applied laboratory educational activities rather than being a research institution. By developing a quality program and excellence in teaching, the College provides diversified educational opportunities to individuals of varied ages. A particularly attractive feature of the College is that it draws most students from the geographic region known as Broome County. It provides an important link with the communities of Broome County and the surrounding regions in the Southern Tier of New York State, making social, economic and cultural contributions to recipients of these services.

The College Provides students with a broad spectrum of both humanistic and scientific/technological related competencies through its 32 degree-granting programs and its 16 certificate programs. These programs encompass six major areas, including Engineering and Engineering Technology, Business and Office Technology, Health Sciences, Liberal and General Studies, Computer Studies, and other occupational programs. We successfully place approximately 90% of our graduates in employment or continued study. The College is approved by the New York State Board of Regents to offer Associate in Arts (AA), Associate in Science (AS), Associate in Applied Science (AAS), and Associate in Occupational Studies (AOS) degrees.

Enrollment includes both full- and part-time students attending day and/or evening classes. Classes run from 8 a.m. to 10 p.m. weekdays, and there is a number of weekend classes.

ADMISSIONS

ADMISSIONS PROCEDURES

Students are selected as they apply, complete the admissions process, and are found suitably qualified for a particular program. The following items are required by the Admissions Office before a decision can be made on a student's application.

1. Application for Admission.
2. A non-refundable $10 application fee (If the applicant is reapplying, seeking admittance into a part-time Early Admissions program, or is a qualified Educational Opportunity Program (EOP) applicant, then this fee may not have to be paid.)

If official transcripts are available for previous high school or college work, they should be sent to the Admissions Office to help in placing the student in the proper courses

Here are a few items to note concerning the application process:

1. Students who wish to enroll full-time in any curriculum must apply through the Admissions Office. Students interested in enrolling part-time in the Health Sciences, Technologies, Engineering and Computer Sciences must also follow the application process for full-time consideration.
2. American College Testing (ACT) or Scholastic Aptitude Test (SAT) score reports are not required, but if either or both are available they should be forwarded to the Admissions Office.
3. Recommendations from high school personnel are helpful, if available.
4. An interview with an Admissions Counselor at Broome Community College is desirable.
5. The postmark date of an application is an important part of the admissions criteria and helps the College implement its first-come, first-served equal opportunity policy.
6. Most programs require that prerequisite courses be successfully completed by June 30 of the summer preceding fall enrollment.

Applicants should recognize that it is their responsibility, not a counselor's or admissions officer's, to complete the necessary forms for admission and to see that all required transcripts and/or other information are received and recognized by the Admissions Office counselors. Completing the application process is the first step toward matriculation, which also includes being accepted into a curriculum and enrolling in coursework.

Acceptance into Broome Community College only applies to the particular semester designated in the acceptance letter. If one does not attend then and wishes to enroll in a future semester, then he/she must reapply. Records are kept on file for three years, so the reapplication process usually involves filling out another application form, unless additional college coursework has been completed.

BCC Study Abroad Programs have separate admissions criteria (see pg. 17).

Admission requirements for foreign students or those whose native language is not English are on pg. 27.

More information or answers to questions are available at the

Admissions Office
Broome Community College
P.O. Box 1017, Binghamton, N.Y. 13902
Phone: (607) 771-5001



SPECIAL ADMISSIONS PROGRAMS

Early Admissions is a program for high achieving students who are in high school and can benefit from taking college courses, full or part-time, before graduating from high school. While high school seniors are usually enrolled in this program, qualified juniors and sophomores may also be eligible.

Anyone interested in part-time Early Admissions should contact the Admissions Office or his/her high school counselor for the special application form. Full-time applicants should use the regular student application.

Educational Opportunity Program (EOP) is designated for students who are educationally and economically disadvantaged. It provides additional economic aid and remedial or developmental academic help. For more information, contact the Educational Opportunity Program in the Wales Building (771-5058).

International Students (from other nations). Broome Community College is authorized under Federal Law to enroll non-immigrant alien students. Admissions requirements for foreign students or those whose native language is not English are on page 27.

Non-High School Diploma applicants may qualify for a high school diploma by successfully completing 24 credit hours of coursework at BCC or any college in a degree or certificate program. Students currently in high school or those having been out of high school less than one year typically cannot qualify for this program. Additional information is available at the Admissions Office.

Transfer Credit for Students who have taken or are taking college level coursework is subject to the approval of the chairperson of the student's academic department at BCC. Grades earned will not be entered into the cumulative grade-point average at Broome Community College. Students must in all cases submit to the College Admissions Office official transcripts of all college level work taken and/or being taken at another college before formal acceptance will be granted.

Students transferring courses to BCC will be required to complete in credit hours the equivalent of a semester's course of study at BCC for graduation. The determination of this minimum will be the responsibility of the department faculty sponsoring the curriculum, but in no case will the requirement be less than 12 semester credits. Ordinarily this means that the last 12 credits will be taken at BCC.

FULL OPPORTUNITY PROGRAM

Broome Community College has a Full Opportunity Program, which is designed to give every individual a chance to fulfill his/her own personal goals and potential. This means that everyone who is a previous June graduate of a Broome County high school or a veteran from Broome County with a high school diploma is given priority for admission until March 1 and is guaranteed admission into the College, but not necessarily assured of space in the program of his/her choice. To be admitted into any program of study, all applicants must meet the academic requirements of that program. When an individual does not have the required academic background for a particular curriculum, he/she will be accepted into a program or selection of courses for which he/she is qualified if space is available. Some students may require more than two years to complete a program of study.

Admission to the College shall not be denied on the basis of age, disability, ethnic origin, nationality, political belief or affiliation, race, religion or sex.

A TDD/TTY TELEPHONE

A TDD/TTY telephone unit is available in the Admissions Office to make it accessible for the hearing impaired. The number is 771-5001. The college also has one in the Counseling and Student Development Center - 771-5210.

TUITION DEPOSIT POLICY

Students admitted to the College prior to August 1 will be billed for a $50 tuition deposit. This payment will be applied toward the Fall Semester tuition bill for those students who register. Students who do not register for the Fall Semester can obtain a refund of the tuition deposit, through the end of the first week of classes, by submitting a request in writing to the College Controller. After the end of the first week of classes, the tuition deposit is non-refundable.

HONORS PROGRAM

The Honors Program is designed for the student who expects to be involved in her/his own education. Participants are challenged to expand their understanding of life and reality through specially designed honors courses and extra curricula activities, close contact with faculty, and involvement with other highly motivated students. It is a new program for a new age, providing an excellent educational opportunity at a reasonable price.

Student's benefits include an increased awareness of political, economic, and social issues, development of critical thinking skills, and preparation for creative leadership in the 21st Century, as well as an Honors diploma which can be an important asset in the competition for placement at selective four-year institutions.

To apply, students who believe they meet the qualifications below and are equal to the challenge of a superior educational program may obtain an application through high school guidance departments or from Dr. JoAnne Maniago, Program Coordinator, Honors Program, Broome Community College, Binghamton, New York 13902. Applications received by Admissions, along with letters of recommendation, will be forwarded to Divisional Deans who, along with Departmental Chairpersons, select students to fill the limited number of vacancies as part of the selection process.

HONORS PROGRAM ADMISSIONS REQUIREMENTS - HIGH SCHOOL SENIORS

1) GPA of at least 3.2 (80 average).
2) SAT combined score of 1,050 or above with no subscore below 450.

OR

ACT composite score of 24 or higher with Math and English subscores of at least 21.

3) Two letters of recommendation:

One from a teacher.

One from a non-scholastic such as an employer, club advisor, coach, or volunteer supervisor.

4) Students from New York - Regents Diploma.

FOR CONTINUING OR TRANSFER STUDENTS

1) Full-Time Students having completed one semester at an accredited two or four year college with a GPA of at least 3.5.

OR

Part-time students enrolled in at least 6 hours per semester having accumulated 12 hours of credits with a GPA of at least 3.5.

HEALTH REQUIREMENTS FOR HEALTH PROGRAMS

A student's enrollment in one of the Health Science programs listed below is conditional upon passing a physical examination and obtaining appropriate immunizations when required. Students should contact the department chairpersons for specific information.

Dental Hygiene
Medical Assistant
Medical Laboratory Technology
Medical Record Technology
Nursing
Radiologic Technology

ACADEMIC PREPARATION FOR ADMISSIONS

CURRICULUM	REQUIRED High School subjects	RECOMMENDED High School subjects
Business Accounting Hotel/Restaurant Management Management Marketing Bus. Admin. Travel & Tourism Real Estate Entrepreneurship	Sequential Math 1 for all other business programs Sequential Math 1, II, III or equivalent for Business Administration	2 units Mathematics 2 units Science College preparatory courses
* **Chemical Engineering Technology**	Regents Chemistry (Min. grade 74) Sequential Math I, II, III or equivalent	Additional Regents Math, Science and Chemistry courses Physics
* **Civil Engineering Technology**	Sequential Math I, II, III or equivalent Regents Physics (Min. grade 65) or General Physics (Min. grade 74)	Additional Mathematics Technical courses
† **Computer Science**	Sequential Math I, II, III or equivalent Precalculus Math or Advanced Algebra Min. grade 74, all courses	Additional Mathematics Physics Computer Programming
† **Computer Technology**	Sequential Math I, II, III or equivalent Min. grade 74, all courses Physics	Additional Mathematics Computer Programming Typewriting
† **Data Processing**	Sequential Math I, II, III or equivalent. Int. Alg. may replace Seq Math III Min. grade 74, all courses	Additional Mathematics Computer Programming Typewriting
† **Dental Hygiene**	Sequential Math I, II or equivalent Biology, Chemistry (Regents or General) Average grade 80 needed in these courses	College Preparatory courses
* **Electrical Engineering Technology**	Sequential Math I, II, III or equivalent (Min. grade 74) Regents Physics (Min. grade 65) or General Physics (Min. grade 74)	Additional Mathematics Technical courses
=* **Engineering Science**	Sequential Math I, II, III or equivalent Advanced Algebra and Precalculus Math Regents Chemistry Regents Physics Min. grade 80, all courses	Additional Mathematics Science courses Technical courses Computer Programming
Liberal and General Studies including Communication & Media Arts	(Students should review degree/emphasis models on pages 54-56. These might help in selecting HS preparatory courses.)	3 Units Mathematics 3 Units Science 3 Units Foreign Language 3 Units Social Studies
* **Mechanical Engineering Technology**	Sequential Math I, II, III or equivalent (Min. grade 74) Regents Physics (Min. grade 65) or Gen Physics (Min. grade 74)	Additional Mathematics Technical courses Keyboarding
† **Medical Assistant**	Sequential Math I or equivalent Biology (Regents or General) Chem. (Regents or General)	Additional Mathematics Sciences courses Typewritting and/or Keyboarding
† **Medical Laboratory Technology**	Sequential Math I, II or equivalent Biology (Regents or General) Chem. (Regents or General)	Additional Mathematics Physics
† **Medical Record Technology**	Sequential Mat I or equivalent Biology (Regents or General)	Additional Mathematics Science, Chemistry, Typewriting
† **Nursing**	Sequential Math I or equivalent Biology (Regents or General) Chem. (Regents or General) Min. grade 74, above courses	College preparatory courses
† **Radiologic Technology**	Sequential Math I, II or equivalent Biology (Regents or General) Min. grade 74 for biology Another Science course	Additional Mathematics Physics (Regents or General) Chemistry (Regents or General)
Office Technologies Executive Secretarial Office Services	If the student does not have Sequential Math I, electives are limited.	2 units Typewriting, 2 Science 1 unit Communications or Business English
Word Processing	Sequential Math I or equivalent required for Word Processing	1 Unit Math (not including General or Business Math) Sequential Math I or equivalent preferred

ALL GRADES ARE FINAL CLASS AVERAGES AND NOT REGENT EXAM GRADES

*BCC has a developmental program that enables students lacking the proper academic preparation for degree-granting curriculums to enroll in appropriate credit or non-credit courses that will qualify them. They can take these courses at BCC or elsewhere during the summer preceding their enrollment. The College reserves the right, however, to consider for admission only those applicants who have completed all prerequisites by June 30. Applicants who elect to take these courses during the spring and fall semesters would need three years to complete the curriculum.

†In these programs, Broome Community College gives priority for admissions to Broome County residents who will graduate from high school this academic year or are service veterans. Students interested in a degree in the Health Science or Computer Studies curriculums who enter the College in another program are cautioned that there is no guarantee that a petition to transfer will be approved. They should discuss the possibilities with the appropriate department chairperson.

FINANCIAL AID

Considerable financial aid is available at Broome Community College, and the College maintains a Financial Aid Office to help students. Information and applications for financial aid are sent to students who are seeking full-time enrollment when they apply for admission. Any part-time student planning to take six credit hours or more may qualify for financial aid by formally applying and being accepted into a degree or certificate program. Part-time students may receive information/applications by contacting the Student Financial Aid Office.

Financial aid at BCC falls into three broad categories - grants that do not have to be repaid, loans on which interest rates are usually low and that have to be repaid after graduation or leaving college, or part-time employment called Work-Study. Assistance usually comes from a combination of these resources, commonly referred to as a "financial aid package."

STUDENT AND FAMILY RESOURCES

A student's financial need is a term used to describe the funds required by a student to pay for his/her college education in excess of the amount that he/she and parents can afford to pay. Financial need is determined by using a standardized formula, which defines the "initial" or "demonstrated" need. The formula:

> Take the "Total educational costs" and subtract the "parental contribution and student's summer earnings." This amount is the initial or demonstrated need.

The Financial Aid Office at Broome Community College operates on the premise that all parents and students have a responsibility to contribute as much as they can toward the cost of the student's education. This contribution plays the primary role in determining the actual initial need.

To qualify for financial aid, a student must be enrolled in a degree program of the College and be taking six credit hours or more, in addition to having initial or demonstrated need. This need can be met in a number of different ways - a combination of grants, loans and work-study funds in varying amounts of each. This combination is put together by the financial aid administrator and is called a "financial aid package."

ESTIMATING EXPENSES

Listed below are charts showing the estimated average costs for the 1987-88 college year for student expenses, determined by whether or not the student lives at home and is dependent on his/her parents. These cover a 9-month period which is the length of the college year, September to May.

EXPENSE CHARTS

FOR DEPENDENT STUDENTS

	*Single Commuter (living home)	*Resident (living near campus)
*Tuition	$1,150	$1,150
Fees	78	78
Books	400	400
Transportation	480	576
Home Maintenance	1,430	NA
Personal Expenses	NA	846
Rent	NA	1,929
Food	NA	1,093
Total	$3,538	$ 6,072
Non-NY State Resident: (Additional tuition)	1,150	1,150
Total	$4,688	$7,222

FOR INDEPENDENT STUDENTS

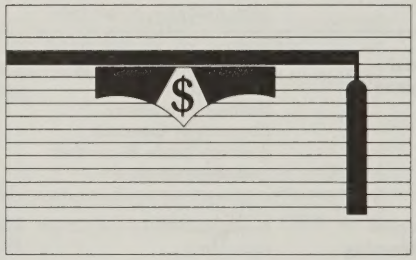
	Single Divorced Widowed Separated (no dependents)	Single Head of Household (w/dependents)	Married (no dependents)	Married (w/dependents)
*Tuition	$1,150	$1,150	$1,150	$1,150
Fees	78	78	78	78
Books	400	400	400	400
Transportation	876	634	691	749
Home Maintenance	NA	NA	NA	NA
Personal Expenses	846	846	1,350	1,350
Rent	1,929	3,857	2,835	3,857
Food	1,093	1,093	2,405	2,405
Total	$6,072	$8,058	$8,909	$9,989
Non-NY State Resident: (Additional tuition)	$1,150	$1,150	$1,150	
Total	$7,222	$9,208	$10,059	$11,139

***THE TUITION AMOUNT HAD NOT BEEN OFFICIALLY ADOPTED WHEN THIS CATALOG WAS BEING PREPARED. HOWEVER, IT IS MOST LIKELY TO BE $1,150.**

NOTES—

*1) A commuter is a student who lives with his/her parents and commutes to school; a resident is an out-of-town student residing locally.
2) Allowances for additional expenses are made for students in certain academic programs. See page 12 under heading "Books, Supplies, Uniforms."
3) Transportation line includes auto insurance, license plates, maintenance. An additional allowance may be allowed depending on distance traveled from home to the College.
4) A child care allowance of $1200 per dependent child under the age of 6 will be added to the expense budget for students with dependents. EXCEPTION: Child care allowance will not be given when spouse is at home (not working or in school).
5) An additional living expense of $1458 per dependent (not including spouse) will be added to the expense budget of all students with dependents.
6) An additional rental allowance of $65 will be given when student has 4 or more dependent children.
7) Medical, child care, debt repayment, and miscellaneous expenses may be allowed, if student is able to document the cost.

—ALL COSTS ARE SUBJECT TO CHANGE—



HOW TO APPLY FOR FINANCIAL AID

To be considered for financial aid, students must apply each academic year.

FEDERAL AND STATE GIFTS

All financial aid applicants will be expected to apply for two major sources of financial aid: the federal government's Pell Grant and New York State's Tuition Assistance Program (TAP). Out of state residents should contact their State Educational Agency or the Financial Aid Office for information on state grant assistance from their state of residence.Although the College provides information, applications and assistance, these funds are not generated by the college and must be applied for directly by the student to the agency. Students may apply for the Pell Grant with the Financial Aid Form (FAF).

Part-time students who have already completed 6 credit hours and enroll for at least 6 but less than 12 credits may be eligible for New York State's Aid for Part-Time Study (APTS) program. Unlike TAP, students must apply directly to the college for determination of eligibility.

Applications and information regarding these and other programs are available at the Financial Aid Office (Wales Building, Room 101).

CAMPUS-BASED FINANCIAL AID

To be considered for both the federal government's Pell Grant AND financial aid administered by the College (Campus-Based Aid), students must submit the Financial Aid Form (FAF) to the College Scholarship Service and the BCC Application for Financial Aid to the Financial Aid Office. By filing the forms outlined above, students will be considered for the following Campus-Based financial aid in addition to the federal government's Pell Grant:

FEDERAL CAMPUS-BASED AID
Perkins Loan (Formerly National Direct Student Loan-NDSL)
College Work Study (CWS)
Supplemental Educational Opportunity Grant (SEOG)

INSTITUTIONAL CAMPUS-BASED AID
BCC Foundation Grants

The College administers a number of programs which have been established by private individuals, companies, and organizations. These scholarship and grant programs have varying eligibility requirements. Students who wish to apply for these special scholarships may request an application from the Financial Aid Office, department chairperson or division dean.

PRIORITY FUNDING DATES

Fall Semester April 30
Spring Semester December 1

Incoming students should apply for financial aid when they apply for admission. Because all campus-based funds are limited, students are strongly encouraged to submit the appropriate forms at least four weeks before the above priority dates.

Completed applications received prior to April 30 will be given first priority. Applications received after this date will be considered as long as funds are available.

The FAF should be mailed to College Scholarship Service before March 30 to be received at the College by April 30.

VERIFICATION

Once the Financial Aid Office has received the results of your processed Financial Aid Form (FAF) from the College Scholarship Service (CSS), you may be selected for a process called verification. This is a procedure used to check the accuracy of the information you reported on your federal financial aid application. You may be required to bring or send any supporting documentation that is necessary to verify the information you reported. If selected, you must complete the process before your financial aid can be awarded.

NOTIFICATION OF DECISIONS

Students are generally notified of the action taken on their application shortly after April 30. Students who apply late will be notified as folders are completed. An explanation of student's rights and responsibilities is sent to all financial aid recipients at the time the award is made. Interested students may receive a copy of this information before an award is made by contacting the Financial Aid Office.

If a Student's request for aid is denied, the reasons for the decision are explained. Students may request an appeal on financial aid decisions by writing a letter to the Vice-President for Student Affairs.

NOTE - Students who have been administratively dropped from their class(es) for non-attendance may receive a reduced financial aid award. If financial aid has already been disbursed, a repayment of a portion or all of these funds may be owed to the College.

SATISFACTORY ACADEMIC PROGRESS FOR TAP, APTS & TITLE IV AID

Federal regulations require aid recipients to maintain "satisfactory academic progress" before receiving Title IV aid (Pell, Perkins Loan, Work-Study, SEOG, Guaranteed Student Loan, SLS and PLUS). The College also requires satisfactory academic progress before students may receive grant assistance from the BCC Foundation or Educational Opportunity Program (EOP). The guidelines used to determine academic progress are outlined on page 21 of the catalog.

Students who have been placed on academic probation may continue to receive financial assistance while on probation. These students have one semester to achieve the minimum standards before facing dismissal from the college.

Students who have been academically dismissed will be denied aid until such time as they can meet the criteria set forth for satisfactory academic progress. Guidelines for appealing the decision of academic dismissal are outlined on page 21 of the catalog. Students who successfully petition for a waiver of dismissal may be eligible for financial aid.

The college has also adopted New York State Tuition Assistance Program (TAP) and Aid for Part-Time Study (APTS) guidelines which require good academic standing for students to continue receiving TAP & APTS. Contact the Registar's Office in Room 206 of the Wales Building for a copy of the guidelines.

Broome Community College does not defer SUMMER tuition based on a TAP Award.

PACKAGING POLICY

At Broome Community College the equity concept of financial aid packaging is used. Eligible students are funded on a need basis and a first-come, first-served order.

The Pell Grant and the New York State Tuition Assistance Program (TAP) represent the floor of the package followed by any employment, loans and grants available.

This kind of financial aid packaging ensures that any student who wishes to attend a post-secondary institution will have the opportunity to obtain the needed funding.

An example of the equity concept:

(1) Total Student Costs (Budget)

(2) Subtract Resources:
- a) Parental Contribution
- b) Student Summer Savings ($700 or $900)
- c) Student Assets
- d) Other Resources

Initial Financial Need

(3) Subtract:
- a) Tuition Assistance Program (TAP) Grant or Estimate
- b) Pell Grant

Unmet Need for Campus-Based Aid

(4) Subtract:
- a) Educational Opportunity Program (EOP)
- b) Perkins Loan, (Formerly NDSL)
- c) College Work Study
- d) Supplemental Educational Opportunity Grant (SEOG)
- e) BCC-Grant in Aid

$400 Unmet Need *

*Most students are able to satisfy their unmet need through the Guaranteed Student Loan Program Program. The amount of unmet need may vary from year to year.

RIGHT AND RESPONSIBILITIES OF FINANCIAL AID RECIPIENTS

Student recipients of financial aid are the beneficiaries of money made available by a variety of agencies - federal, state, institutional, and/or private. The act of accepting a financial aid award signifies that the recipient knows about, understands, and is willing to comply with both the rights and the responsibilities involved with that award. Thus, it is the recipient's **RIGHT TO KNOW:**

1-What federal, state and institutional financial aid programs are available.
2-The deadlines for submitting application forms for each assistance program
3-The cost of attending the college and the refund policy
4-The criteria used by the college and the refund policy.
5-What resources (such as parental contribution) are considered in the calculation of financial need and how much of that need, as determined by the college, has been or will be met, and how (loan, grant and/or work-study)
6-How much of the financial aid will have to be repaid, and what portion is a grant (gift-aid). If the aid is a loan, the recipient should know what the interest rate is, the total amount that must be repaid, the payback procedures, the length of time allowed to repay the loan and when repayment is to begin.
7-How the college determines whether the student recipient is making satisfactory progress and what happens if not.

It is the recipient's **RESPONSIBILITY** to:

1-Know and understand fully the financial aid program and one's specific financial aid package before signing forms.
2-Make sure that all application forms are completed accurately and submitted, on time, to the right place.
3-Pay special attention to and accurately complete the application for student financial aid. Errors can result in long delays in the receipt of financial aid. Intentional misreporting of information on application forms for federal financial aid is a violation of law and is considered a criminal offense subject to penalties under the U.S. Criminal Code.
4-Return any and all additional documentation, verification, correction, and/or new information requested by either the Financial Aid Officer or the agency to which the application is submitted.
5-Read and understand all forms that one signs and keep copies of them.
6-Accept responsibility for all agreements signed.
7-Notify the lender of changes in name, address or school status, if one has a loan.
8-Perform the work that is agreed upon in accepting a College Work-Study award.
9-Know and comply with the deadlines for application and/or reapplication for aid.
10-Know and comply with the school's refund procedures.



GRANTS

NOTE-The following financial aid information is current as of Spring 1987. Due to the nature of financial aid programs, some of this information may be changed during the academic year. Please contact the Financial Aid Office for updated information.

ELIGIBILITY	AMOUNT PER YEAR	WHERE/HOW TO APPLY
TUITITION ASSISTANCE PROGRAM (TAP)		
Full-time student at any accredited college in New York State. Resident of New York State. Income and academic guidelines involved.	$350 to $2800, not to exceed tuition. Based on income.	New York State Higher Educational Services Corp. (HESC) 99 Washington Avenue Albany, N.Y. 12255 Forms available in BCC Financial Aid Office
AID FOR PART-TIME STUDY (APTS)		
Part-time students and residents of New York State. Must have already completed 6 credit hours and enroll for at least 6 but less than 12 credit hours. Income and academic guidelines involved.	Amount of tuition or less depending on need and availability of funds.	Forms and further information available in BCC Financial Aid Office.
REGENTS COLLEGE SCHOLARSHIP **(Scholarships for nursing students and children of deceased or disabled veterans also available)**		
Based on SAT or ACT test scores. For full-time students at any accredited college in New York State who are New York State residents.	$250 per year. Depending on income and class level, a TAP award may also be received that could combine with the $250 to equal the tuition charge.	New York State Higher Educational Services Corp. (HESC) 99 Washington Avenue Albany, N.Y. 12255
EDUCATIONAL OPPORTUNITY PROGRAM (EOP)		
Full-time and half-time students with financial need and less than an 82 high school average. Family income must be below a specific level.	Varies according to individual need. Average of $275 per student per academic year.	Application available in the Educational Opportunity Program Office at BCC.
PELL GRANT PROGRAM		
Accepted or enrolled full-time or half-time undergraduate students who demonstrate financial need.	From $200 to $2100. Cannot exceed 60% of the cost of college expenses.	Forms available in BCC Financial Aid Office and in high school guidance counselor offices after Jan. 1.
SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)		
For full-time or half-time students with demonstrated high financial need. On first-come, first-served basis.	Up to $4000 depending upon need and cost of college expenses.	Student must submit a Financial Aid Form and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office and in high school guidance offices.
BCC FOUNDATION GRANTS		
Full-time or half-time students with financial need. On first-come, first-served basis.	Varies according to individual need.	Submit Financial Aid Form and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office.

LOANS

ELIGIBILITY	AMOUNT PER YEAR	WHERE/HOW TO APPLY
PERKINS LOAN (Formerly NDSL)		
For full-time or half-time students with financial need. Student borrows from the college on own signature. Awarded on a first-come, first-served basis.	Amount varies according to student's need. Up to $4500 for first two years of undergraduate study, and up to $9000 for all years of undergraduate study.	Student must submit Financial Aid Form and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office.
GUARANTEED STUDENT LOAN (GSL)		
For full-time or half-time students. Student borrows on own signature from a participating bank. Student must show financial need.	Maximum of $2625 per year for the first and second year of an undergraduate program, and $9000 per year for the remaining undergraduate years - not to exceed a cumulative of $17,250.	New York State residents indicating an interest in a GSL by checking appropriate box on the Financial Aid Form (FAF), will receive a loan application by mail. GSL applications can also be obtained at most banks or credit unions. Processed (FAF) must be on file in Financial Aid Office, along with BCC Application for Financial Aid.
SUPPLEMENTAL LOANS FOR STUDENTS (SLS) **(Formerly Auxiliary Loans to Assist Students - ALAS)**		
For students who are financially independent of their parents.	Maximum of $4000 per year. Total loan limit is $20,000.	NYS residents can apply on Guaranteed Student Loan application by checking appropriate box. Applications are available at most banks or credit unions from state of residence.
PARENT LOAN FOR UNDERGRADUATE STUDENTS (PLUS)		
Loan program for parents of dependent undergraduate students enrolled at least half-time.	Maximum $4000 per year per student. Total loan limit is $20,000 per student.	Applications are available at most banks or credit unions from state or residence.
PAULINE PARKER LOAN		
For full-time students who are Broome County residents, under 25 years of age, and in financial need.	$1,000 maximum per year. No more than $500 per semester. No interest charge.	Forms available in BCC Financial Aid Office.
EMERGENCY LOANS		
For full-time or half-time students in financial emergencies (i.e. an unforseen expense affecting the ability of the student to attend college). Sponsored by the BCC Foundation.	$250 maximum. No interest charge. Repayment in 30 days.	Forms available in BCC Financial Aid Office. Student must substantiate need with Financial Aid Officer for all loan requests.

EMPLOYMENT

ELIGIBILITY	AMOUNT PER YEAR	WHERE/HOW TO APPLY
COLLEGE WORK-STUDY (CWS)		
For full-time or half-time students with financial need. Awarded on a first-come, first-served basis.	Students may work up to 20 hours a week when classes are in session or up to 37½ hours a week during vacation. Wage: Minimum.	Student must submit Financial Aid Form and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office.

— FOR ADDITIONAL INFORMATION CONSULT THE BCC FINANCIAL AID BROCHURE OR THE FINANCIAL AID OFFICE. —

EXPENSES
TUITION

The tuition amount had not been officially established when this catalog was being prepared. The amounts in this column may be subject to change.

Tuition and fees are payable at the Student Account Office according to a payment schedule released by the College each semester. The responsibility for payment rests upon the student, who will be billed prior to the start of each semester. Both full-time and part-time students who have registered for courses will be "de-registered" if they fail to meet established due dates for tuition/fee payment.

Students who are administratively dropped for non-attendance during the semester continue to have a tuition and fee obligation.

STUDENT CARRYING 12 OR MORE CREDIT OR CREDIT-EQUIVALENT HOURS

—considered full-time students.

For New York State residents
With residency certificate$575 per semester
Without residency certificate $1,150 per semester
For out-of-state residents $1,150 per semester

Students admitted to the College prior to August 1 will be billed for a $50 tuition deposit. This payment will be applied toward the Fall Semester tuition bill for those students who register. Students who do not register for the Fall Semester can obtain a refund of the tuition deposit, through the end of the first week of classes, by submitting a request in writing to the College Controller. At the end of the first week of classes, the tuition deposit is non-refundable.

STUDENTS CARRYING FEWER THAN 12 CREDIT OR CREDIT-EQUIVALENT HOURS

—considered part-time students.

For New York State residents $46 per credit or
With residency certificate credit equivalent hour
Without residency certificate $92 per credit or
For out-of state residents$84 per credit hour

NOTE-See "credit equivalent" on page 21.

Many students may qualify for financial aid, some of which is applicable toward tuition. **See Financial Aid section on pages 8 through 11.**

SEE TUITION REFUND POLICY ON PAGE 13.

RESIDENCY CERTIFICATE

To qualify for the resident tuition fee, a student is required by law to present once each academic year on or before registration a residency certificate indicating that he or she has been a legal resident of the State of New York for one year and of a county for six months.

Broome County Residents—Full-time students admitted to the College will be mailed a copy of the application for residency certificate prior to registration. This application must be completed and presented at the time of tuition payment.

Out-of-County Residents—Full-time students admitted to the College will be mailed a copy of the application for residency certificate prior to registration. The application must be completed, notarized and presented to the County Treasurer of the **County in which the student resides.** The County Treasurer will then issue a residency certificate to the student. This residency certificate must be presented at the time of tuition payment.

Part-Time Students must meet the same requirements as stated above. The application for residency certificate form is available at the student Account Office.

The completed residency forms are required once each academic year.

Failure to comply with this requirement will result in paying double tuition, not to exceed the limitations cited above.

BOOKS, SUPPLIES, UNIFORMS AND OTHER STUDENT EXPENSES

Students provide at their own expense the necessary books and instructional materials. These may be purchased at the College Book Store maintained by the Faculty-Student Association for the convenience of the students. The cost varies, depending on the curriculum, from about $400 to $500.

In the Health Science curriculums students will provide, at their own expense, their own transportation to off-campus locations for necessary clinical and other experience.

In addition, some curriculums require uniforms. Among these are Nursing, Radiologic Technology, Medical Laboratory Technology and Medical Assistant. Gym clothes are necessary for physical education classes. Dental instruments and pants-type uniforms are prescribed for Dental Hygiene students.

The following expenses are in addition to the usual cost of about $400 per year for books and are included in financial aid allowance for students enrolled in these programs:

	Freshman	Senior
Civil Technology	60	90
Dental Technology	728	393
Electrical Technology	75	0
Mechanical Technology	45	60
Medical Assistant	75	0
Medical Lab Technology	52	0
Medical Records Technology	105	0
Nursing	435	0
Office Technologies	30	50
Radiologic Technology	145	0

COLLEGE FEES

These fees could be somewhat different, as they had not been officially established when this catalog was being prepared.

Application Fee $10
**Late Registration 10
Parking Registration 1
Transcript Fee 1
Returned Check Fee 10
Credit by Examination
Non-Laboratory Course 25
Laboratory Course Maximum 65
$25 plus $10 for each clock hour of lab examination (See page 15)

Credit by Evaluation *50 plus
(Portfolio Assessment)
*In addition to the $50 fee there is a charge of $5 per credit hour. This $5 is refundable if credit is not granted. The $50 is non-refundable, however. (See page 15.)
Chemistry Laboratory Fee $5 per semester
For all students taking chemistry laboratory courses with 200 numbers ($5 per student)
Computer Usage Fee $TBD
(Fee for supply intensive computer courses under consideration at time of printing.)

**Late registration period begins on the first day of classes.

STUDENT FEES

STUDENT ACTIVITY

Full-Time Student $33 per semester
Part-Time Student .. $2 per credit hour

The activity fee entitles all students to admission to varsity games, convocations, dances and parties, as well as a subscription to the student newspaper and the opportunity to participate in a varied program of co-curricular activities, including intramural athletics.

The Student Activity Fee is budgeted and administered by the Student Government with the approval of the College Administration and in recent years has been apportioned to the following activities:

Campus Publications
Newspaper, Yearbook
Program Board
Speakers, Performers, Dances, Movies, Picnics, Special On and Off-Campus Programming
Club Council
32 funded clubs including most curriculum organizations
Athletics
13 male and female intercollegiate teams, coaching stipends, intramurals, administrative expenses
Student Government Association
Administrative expenses, vehicle maintenance, class gift, audit, supplies

SEE REFUND POLICY ON THIS PAGE.

ACCIDENT INSURANCE, HEALTH SERVICE FEE

Full-Time Student Accident Insurance $9 per year
Health Service Fee
Full-Time Students $3 per semester
Part-Time Day Students $1 per semester
(This is a compulsory fee and covers all services provided in the Health Service.)

Money collected from the Health Service fee is used for physician services, drugs, supplies, educational material, diagnostic equipment, special health programs and related health Service expenses. The fee is non-refundable is the student withdraws from the College.

The accident policy covers the student for 12 months commencing the first day of classes for expenses incurred as a result of any accident, on or off campus. Maximum coverage is $1,000 per accident. Claim forms are available in the Health Service during the year, and must be filed with the Health Service before expenses will be paid. Students who withdraw and wish a refund of their accident policy must apply directly to the insurance company.



INTERNATIONAL STUDENT HEALTH INSURANCE

International students must show that they have health insurance coverage before they may enroll at the College. Health Insurance is available through the College for $130 per semester (*this dollar amount may be subject to change). Claim forms are available in the Health Service during the year. Students who withdraw and wish a refund of their health insurance fee must apply directly to the insurance company. Note that the "Health Insurance" mentioned in this paragraph is different from the "Health Service Fee" in the first paragraph above.

MEDICAL INSURANCE

The College does not provide medical insurance, but it is available through a number of insurance companies including Blue Cross/Blue Shield. Other plans are available through insurance companies in the area.

GRADUATION/CERTIFICATE FEE

Graduation $18
Certificate (part-time evenings only) $8

Paid during semester preceding graduation and is refundable if the student does not graduate or earn certificate.

ALUMNI LIFETIME MEMBERSHIP $25

Membership in the Broome Community College Alumni Association is optional. The lifetime dues are payable during the semester preceding graduation, and they entitle graduates to complete Association benefits.

FOR GENERAL INFORMATION CONCERNING CREDITS, TRANSCRIPTS AND TUITION FOR STUDY ABROAD, INTERSESSION AND SUMMER SESSION SEE PAGE 17.

REFUND POLICIES, PROCEDURES

TUITION REFUND POLICY

Fall and Spring Semesters

Students who **officially withdraw** from classes during the first four weeks of a semester will be entitled to tuition refunds on the following basis-100% refund during the first week, 50% during the second week, and 25% during the third and fourth weeks. After four weeks of classes there will be no refunds. See College Calendar on page 142 for additional information on dates for tuition refunds.

A change in this policy was being considered when this catalog was being prepared.

NOTE—Participants in the New York Civil Service Employees Association Labor Education Action Program (LEAP) will be subject to the tuition refund regulations specified in the LEAP guidelines.

SUMMER SESSION

Students who withdraw from Summer Session, classes will be entitled to a 100% refund during the first week of the term. After that, there will be no refunds.

FEE REFUND POLICY

The student activity fee is refundable according to the same schedule as tuition. See "Tuition Refund Policy" above.

REFUND PROCEDURE

An application for refund of tuition and fees must be made in writing in the Registrar's Office (W-206). The application must be on the College form provided. The date on which the application is filed is considered the official date of the student's withdrawal and any refund to which the student may be entitled is computed using the date.



ACADEMIC AFFAIRS

REQUIREMENTS FOR GRADUATION

COMMON REQUIREMENTS FOR ALL FOUR DEGREES GRANTED BY THE COLLEGE

1. Successful completion of all courses for the degree as contained in this Catalog.
2. A 2.00 Cumulative GRADE POINT AVERAGE in those courses applicable to the degree.
3. Recommendation of the faculty for the awarding of the degree.
4. Satisfaction of all obligations to the College.

THE ASSOCIATE IN SCIENCE DEGREE (AS)

This degree is awarded to graduates of the Business Administration, Communication & Media Arts, Computer Science, Engineering Science and Individual Studies curriculums, and Mental Health and the Science Option in Liberal and General Studies.

5. Curriculum Requirements:
 a. At least 30 credits in the humanities, natural sciences, mathematics, the social sciences.
 b. Physical Education - 2 credits (for Business Administration, Liberal Arts, Computer Science and Engineering Science students only).

THE ASSOCIATE IN APPLIED SCIENCE DEGREE (AAS)

This degree is awarded to graduates of curriculums in these fields of study:

Accounting
Chemical Engineering Technology
Child Care
Civil Engineering Technology
Computer Technology
Criminal Justice-Police
Data Processing
Dental Hygiene
Electrical Engineering Technology
Executive Secretarial
Fire Protection
Hotel/Restaurant Technology
Individual Studies
Industrial Technology
Marketing/Management
Mechanical Engineering Technology
Medical Assistant
Medical Laboratory Technology
***Medical Record Technology**
Nursing
Office Services Assistant
Paralegal Assistant
***Radiologic Technology**
Real Estate
Travel & Tourism
Word Processing

5. Curriculum Requirements
 a. The minimum number of credits in a student's major field as determined by each academic department. These are courses intrinsic to and required by the various curriculums.
 b. A minimum of 20 credits in Liberal and General Studies courses will include:
 1) Social Sciences: a minimum of 6 credits
 2) Natural and Physical Sciences (including mathematics): a minimum of 6 credits
 3) Humanities: a minimum of 6 credits in English (may include a maximum of 3 hours in speech)
 c. Satisfactory completion of all courses in a curriculum or as approved in a department.
 *d. Summer clinical experience required for graduation in curriculums noted.

THE ASSOCIATE IN ARTS DEGREE (AA)

This degree is awarded to graduates in the Liberal and General Studies curriculum.

5. Liberal and General Studies requirements are distributed as follows:
 a. English: a minimum of 12 credits, of which 6 shall be in composition and 6 in literature.
 b. History: a minimum of 6 credits in approved courses.
 c. Humanities: a minimum of 6 credits (6 in Philosophy or 6 in a foreign language).
 d. Mathematics: Students who have completed fewer than 3 units of secondary school mathematics (through 11th year math) are required to take two semesters of college level mathematics. Students who have completed 3 units of secondary school mathematics (through 11th year math) are required to take one semester of college level mathematics. Students who have completed more than 3 units of secondary school mathematics (including 11th year math) are not required to take additional mathematics. They may, however, elect an appropriate math course or an elective in another field.
 e. Natural and Physical Sciences: a minimum of 8 credits.
 f. Social Sciences: a minimum of 6 credits.
 g. Electives: 16 credits minimum. A maximum of 16 credits may be taken outside the offerings in Liberal and General Studies with the approval of the dean of the division.
 h. Physical Education: 2 credits. Exceptions to this requirement may be made by the dean of Liberal Arts for valid reasons.
 i. Satisfactory completion of all courses in a curriculum or as approved in a department.

THE ASSOCIATE IN OCCUPATIONAL STUDIES DEGREE (AOS)

This degree is awarded to graduates of the Tool and Die Making curriculum and requires a minimum of 64 semester credit hours.

5. There is no specific requirements to take particular numbers of credit in general education courses for the AOS degree.

CREDIT BY EVALUATION

NON-TRADITIONAL STUDY

Broome Community College acknowledges that it is necessary and worthwhile to consider various non-traditional activities for credit. By documenting and demonstrating that learning has taken place through various prior experiences, matriculated students may be awarded academic credit.

The divisional dean is the initial contact for students interested in obtaining more information about non-traditional study and examination programs. Students will be assisted in determining whether or not such study or examinations would be worth pursuing for their educational objectives. The appropriate academic department is responsible for integrating any credit achieved in this manner into the student's academic program.

ADVANCED PLACEMENT EXAMINATION (AP)

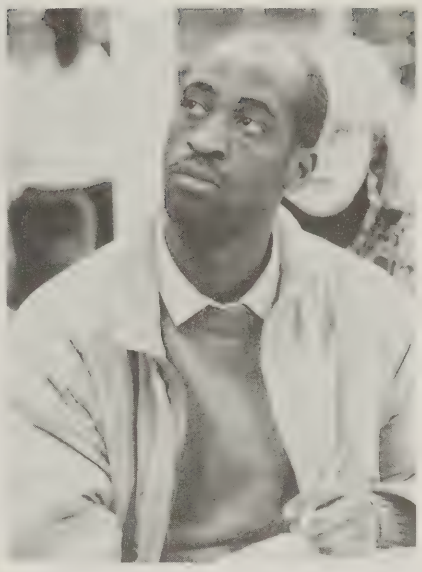
The College will recognize for credit the AP examinations of the College Entrance Examination Board. A score of three or above is acceptable for credit upon departmental approval. Laboratory courses may require additional lab work for full credit for a college course. Credit awarded will be handled as a transfer credit.

COLLEGE PROFICIENCY EXAMS (CP)

The CP exams of the University of the State of New York will be recognized for credit upon approval by the appropriate department. Credit awarded will be handled as transfer credit.

CREDIT LEVEL EXAMINATION PROGRAM (CLEP)

The College will recognize successful achievement at or above the 50th percentile on CLEP subject exams in accordance with SUNY and American Council of Education guidelines. Approval of credit for degree requirements or electives is determined by the appropriate department. Credit approval will be handled as transfer credit. Under certain circumstances, a department may accept general examination scores.



BCC CREDIT BY EXAMINATION (CBE)

The College in many instances provides for full or part-time BCC students credit by examination for knowledge gained outside the traditional classroom situation. This is strictly for use at BCC; however, credit awarded will be handled as transfer credit. Guidelines for this procedure are available from the College's department chairpersons. There will be a fee charge for the exam. If a student receives an "F" grade after normal completion of a course, no credit by examination may be given in that subject.

PORTFOLIO ASSESSMENT

(Special Individual Assessment)

The College will evaluate for credit various types of learning acquired outside the usual classroom environment and a fee is required, based on credit hours requested. Particular criteria for awarding credit may be applied by an academic department. Approval of credit is the responsibility of the appropriate department. Students must identify what has been learned. Contact the divisional dean for additional information.

SPECIAL ASSESSMENT OF EXPERENTIAL LEARNING

The College will evaluate for credit various types of learning acquired through participation in learning experiences or training provided by business, industry, unions, professional societies, governmental agencies or the military. Particular criteria for awarding credit may be applied by an academic department, and approval of credit is the responsibility of the department. Contact the divisional dean for additional information.

PROGRAMS OF THE COLLEGE

DEGREE PROGRAMS

Graduates of Broome Community College receive associate degrees, and the courses of study are organized into four divisions - Business and Office Technologies; Technology, Engineering and Computing; Health Sciences; Liberal and General Studies. Liberal Arts courses are included in all curriculums, as it is believed that students need more than technical competence to understand people and their daily working and personal interrelationships. Applicants to the College should consider carefully the type of program they wish to pursue, for the nature of the offerings makes it difficult to switch from one curriculum to another after commencing studies.

TECHNOLOGY, ENGINEERING AND COMPUTING

In the area of technical education, the College offers 10 programs. One, Engineering Science, is in effect the first two years of an engineering curriculum. Students who do satisfactory work in it should experience little difficulty in transferring to engineering colleges at the third-year level.

Four others are designed to educate engineering technicians in the fields of Chemical Engineering Technology. Civil Engineering Technology, Electrical Engineering Technology and Mechanical Engineering Technology. Students in these programs are prepared for employment in various types of technical work immediately after graduation, although many students do transfer to four-year colleges.

The Computer Studies Department offers three programs - Computer Science, Computer Technology and Data Processing. The Computer Science program is designed for transfer to four-year colleges, while graduates of the other two are prepared for immediate employment.

Other programs in the technical field offered by the college include Industrial Technology and Tool & Die Making.

BUSINESS AND OFFICE TECHNOLOGIES

The Business curriculums are designed primarily to prepare graduates for immediate employment in one of 11 fields - Accounting, Banking,Hotel/Restaurant Technology, Real Estate, Travel & Tourism, Retail Management, Entrepreneurship, Management, Marketing, Word Processing, Executive Secretarial and Office Services Assistant. In addition, there is a 12th option, Business Administration, that combines more university parallel preparation with a minimum of job-oriented courses. This program is intended for the person who plans to continue his/her college education for a baccalaureate degree, even though he/she may want to work for a while before transferring to a four-year college.

It is possible to transfer from all programs. But because each student's transfer credits are evaluated by the four-year institution, the number of credits accepted can vary.

LIBERAL AND GENERAL STUDIES

University parallel curriculum in Arts and Sciences and in Special Career Programs of an occupational nature are included in this division. Curriculums in Arts and Sciences prepare students for transfer to four-year colleges and universities. While the aim of liberal learning is to broaden human perspective and deepen understanding through the study of philosophy, history, natural sciences, literature and the arts, students who identify career/professional goals early can begin to develop appropriate academic concentrations. Liberal and General Studies degree programs are also offered for those seeking immediate employment. Refer to the career models on page 55 through 56 in this catalog.

The College offers, through its Special Career Programs Department, degree opportunities in five other academic areas - Child Care, Criminal Justice, Fire Protection Technology, Individual Studies and Paralegal Assistant. All lead to the Associate in Applied Science degree, and Individual Studies students may earn either that degree or the Associate in Science degree, depending on their program of study. All are conducted under the Special Career Programs Department, along with a Paralegal Assistant Certificate program.

HEALTH SCIENCES

Opportunities for men and women interested in the health sciences field are provided in six areas - Dental Hygiene, Medical Assistant, Medical Laboratory Technology, Medical Record Technology, Nursing and Radiologic Technology. Graduates are prepared to work immediately after graduation in physician's or dentist's offices, laboratories or hospitals. Graduates of these programs are also qualified to take whatever licensing examination their professions require. The College also offers a Dietary Manager Certificate program for those working in the field.

CERTIFICATE PROGRAMS

Broome Community College also has certificate programs which are less than two years in length, have more specific objectives than the associate degree offerings, and consist of about one year of college credit. Some are designed to prepare students for jobs that require specialized higher education, but not necessarily a college degree; some provide students with an opportunity to upgrade their academic backgrounds or expand their qualifications for a particular field of study; and some offer college credits and additional training of people already working in the field.

Most of the certificate offerings carry college credits, and they can lead a person into some of Broome Community College's degree-granting curriculums. They can be taken on a full-time or part-time basis, and most of them are offered in the evening although some are available through day classes. No specific high school courses are required for enrollment.

Further details, a listing of courses, and literature about most of these certificate programs are available in Room 101 of the library.

CERTIFICATE PROGRAMS

Business Emphases
- **Accounting**
- **Management**
- **Marketing/Sales/Retailing**

Early Childhood
Criminal Justice
Dietary Manager
Fire Protection Technology
General Office
Industrial Technology Emphases
- **Chemical**
- **Electrical**
- **Mechanical**
- **Production Management**

Interior Design
Liberal and General Studies
Machinist Related Instruction
Paralegal Assistant
Technical

INTERNATIONAL STUDIES PROGRAM

Broome Community College is a founding member of the College Consortium for International Studies, a group of 110 colleges spreading geographically from Canada to Florida and from California to Maryland. This consortium, during the 1986-87 academic year offered students about 65 overseas academic programs in 27 foreign locations.

The programs range from structured, formal courses at affiliated schools and institutions abroad, to service-learning and contract-independent study courses. Students may choose from short-term programs in January and during the summer to longer term, semester and year-long programs.

SEMESTER ABROAD PROGRAMS

BCC provides formal, structured programs lasting for a semester, a year or two years, in England, Denmark, Israel, Mexico, Scotland, Germany and Switzerland. Students study a full semester program (usually 15 to 18 credits) that is arranged prior to their departure at affiliated school, institutions, colleges or universities abroad.

The subject areas range from liberal arts courses to specialized programs, such as criminal justice, and languages. Costs of these programs vary greatly, with emphasis on high quality programs at public institutions. The costs approximate those at U.S. public colleges. For the 1986-87, the cost of a full semester in the popular program in England was about $2,600. This includes full room and board, all tuition cost, round trip air transportation, and many extras.

Many BCC students will find their academic and personal lives enriched through a cultural experience difficult to match in a conventional two-year course of study in this country. BCC maintains close communication with consortium offices in New York, London and Jerusalem to facilitate the placement of students in qualified institutions abroad.

ADMISSION TO PROGRAMS

Admission to the College does not automatically insure admission to BCC program's overseas; separate application must be made to the consortium. Students will be evaluated on their academic ability, motivation, maturity and potential adaptability to a foreign culture. In addition to BCC approval, interviews with personnel from affiliate consortium institutions may be required. All programs are available to students from any college or the general public. At least one-half of the participants last year were community residents who went on short-term programs on a non-credit basis.

JANUARY & SUMMER SHORT PROGRAMS

During each academic year BCC conducts a variety of short-term programs in January and in the summer months. Students at BCC who have been introduced to study abroad through these short-term programs, usually two to three weeks in length, often decide to study overseas for a semester or year.

The short-term courses have grown in scope, as well as in number. During recent intersessions, courses have been in London in Theater, Real Estate, Criminal Justice Seminar, Nursing Seminar, Social Welfare Seminar, Psychology Seminar. Students were also able to study Italian Culture and Art in Italy and Tropical Field Ecology in the Virgin Islands. Costs for these programs last year started at $729 for the London courses. A full list of the January offerings is usually available by November.

The summer programs vary in length from two weeks to two months. Recent offerings have included Music and Art in Vienna, Antiquities of Ireland, Italian Culture and Language History and Culture of Spain and North Africa, Discover China, and Anthropology Field Study in Mexico. Costs in the summer programs are somewhat higher than those in January due to higher airline cost.

During the summer, there are special month-long programs at the University of Madrid for Spanish students and the University of Caen for French students. The cost of these programs was $1,995 each for 1986, but most students are able to qualify for scholarships under a special grant from the Spanish or French governments. Similar programs are expected to be offered in Italy and Germany this year. A full list of courses being offered during the summer is usually available in March.

STUDENTS FROM OTHER NATIONS
(See Page 27)

CREDITS, TRANSCRIPTS AND TUITION

For Study Abroad, Intersession and Summer Session

Students register at BCC and pay the appropriate tuition, which in many cases covers the instructional cost abroad. Students are monitored through consortium offices at the college they attend. Upon the successful completion of the formal program or after fulfillment of the contract, students will receive a BCC transcript reflecting the grades achieved or the course equivalents or the work done through the contract, greatly facilitating transfer of credits to other American institutions.

Full-time students registering for courses that are scheduled other than in the Fall or Spring Semesters will be charged at the part-time tuition rate. Sessions other than fall and spring semesters will be called Summer Session and Intersession. Students earning credits in Summer Session and Intersession courses may earn up to 18 credits in the fall or spring semesters or up to 21 credits with permission of the appropriate dean and department chairperson.

Students who wish to earn more than six hours during any of the Summer Session terms or the Intersession are required to obtain the approval of the appropriate dean and department chairperson. The refund policy is not in effect for students taking courses in Intersession. Refund policies in semester length programs are determined by the receiving foreign institutions.

Grades received for all courses taken from the beginning of the Fall Semester through the end of that semester will be considered first semester grades. Grades received for all courses taken from the end of the first semester through the end of the end of the second semester (even if taken in January or abroad) will be recorded as second semester grades.

Summer Session is treated like a third semester. Its dates begin after the Second Semester Master Schedule of courses is complete through the beginning of the fall semester (grades for all Summer Session terms under the transcript heading, Summer Session).

All credits earned are Broome Community College credits, which allows students to use their financial aid packages for semester length programs.

Students may earn up to 18 credits per semester, leading to an associate degree. Credits for Intersession/short-term programs range from one to six, depending on the time spent abroad and the instruction offered in the program.

For additional details about any of the above programs, students should contact the International Studies Program Office at Broome Community College in Titchener Hall (Phone 771-5021).

COOPERATIVE PROGRAMS WITH OTHER COLLEGES

Broome Community College has direct transfer agreements with a number of four-year colleges to facilitate the acceptance of BCC graduates into the third year of study. The number of colleges with which BCC has such agreements is increasing each year. Further details are available in the Counseling and Student Development Center (Wales Building, Room 200).

WITH SUNY BINGHAMTON

TRANSFER AGREEMENT

All Broome Community College students who have graduated or will graduate with an AA or AS degree with a grade point average of at least 3.0 will be admitted, upon application, as matriculated students in Harpur College of SUNY at Binghamton. Those students graduating with the above degrees but with a grade point average between 2.6 and 3.0 are usually admitted. Others, including those with an AAS degree, should contact the SUNY at Binghamton Office of Admissions. Admitted students will be granted junior-year standing upon presentation of 56 or more transferable credits.

CROSS-REGISTRATION

BCC students may cross-register at SUNY Binghamton for one course each semester. The courses for which they cross-register must be courses that are not available at Broome Community College. No additional tuition is necessary. Additional information is available in the Registrar's Office in the Wales Building, Room 206.

WITH KEYSTONE JUNIOR COLLEGE

BCC students may also cross-register at Keystone Junior College in LaPlume, PA for one course each semester. The courses for which they cross-register must be ones that are not available at Broome Community College, and they can take them without paying additional tuition. Additional information is available in the Registrar's Office (Wales Building, Room 206).

WITH COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY (SUNY)

Pre-Environmental Science and Forestry

This program is designed for those students who ultimately desire a B.S. degree in the Environmental Science and Forestry (ESF), which is an upper division/graduate center.

After the first two years of study at Broome Community College, transfers to ESF may apply to a variety of programs at Syracuse which may include the **biological sciences** (botany and forest pathology, entomology, zoology, wildlife biology, silvics, pest management); **chemistry** (natural and synthetic polymers, biochemistry and natural products, environmental); **forest engineering, paper science and engineering; wood products engineering; and forestry** (resource management, forest resource science, management science, environmental forestry, applied resource management). The program in **landscape architecture** leads to a B.S. degree in environmental studies and, after one additional year, a Bachelor of Landscape Architecture degree.

Persons planning to transfer should follow the program requirements in consultation with BCC's Pre-Environmental Science and Forestry campus advisor for selection of electives which may vary according to the curriculum at ESF.

Successful graduates of Broome Community College's Pre-Environmental Science and Forestry Program generally gain admission to the SUNY College of Environmental Science and Forestry with full junior class status.

Contact the Liberal Arts Office in Titchener Hall, Room 108.

ARTICULATION AGREEMENTS

Broome Community College has special articulation agreements with many 4 year colleges for the purpose of gaining as many transfer credits as possible for BCC graduates who wish to study at those schools after completing their studies at BCC. Students are encouraged to contact their divisional dean or the Counseling and Student Development Center for more information.

GUARANTEED TRANSFER PROGRAM WITH STATE UNIVERSITY OF NEW YORK

Students who graduate from Broome Community College with Associate in Arts or Associate in Science degrees are guaranteed admission at the third-year level, to a four-year college of the State University of New York. This guarantee has some limitations, and details are in the Counseling and Student Development Center (Wales Building, Room 200).

ONE-PLUS-ONE PROGRAMS

Broome Community College has One-Plus-One Programs with other two-year colleges to enable a student to attend BCC for one year and then transfer to the other college for the second year for the Associate in Applied Science degree. This program permits students to begin studying at BCC for a degree in a field not offered at this college. By taking the BCC courses that one needs for the particular degree involved, residents of Broome County can enjoy the advantage of living at home during one year of their college attendance. Students taking these One-Plus-One Programs are Liberal and General Studies students at Broome Community College because most of the courses they take at BCC are Liberal and General Studies courses.

Check with the Liberal and General Studies Office for more information about these programs.



TWO-PLUS- TWO PROGRAMS

In addition to the one-plus-one programs, Broome Community College also has co-operative arrangements with four-year colleges. These cooperative arrangements allow students to take the first two years of a four-year degree at Broome Community College and then complete studies for the baccalaureate degree at the particular four-year college, usually in two additional years.

Colleges listed below have cooperative arrangements with Broome Community College in the area of study indicated. Contact the Admissions Office at Broome, the appropriate department chairperson, and/or the transfer counselor in the Counseling and Student Development Center for specific information on course requirements. In addition, many of the four-year colleges require specific grade point averages to be eligible for transfer.

College of St. Rose
All AA, AS degree

Cornell University (College of Human Ecology)
Nutritional Sciences
Human Development and Family Studies
Human Service Studies/Social Work
Consumer Economics and Housing
Design and Environmental Analysis

Fairleigh Dickinson University
AAS Degree in Civil, Electrical, Mechanical Engineering Technology

Hofstra University
Full transfer for all AA and AS in Liberal and General Studies, Business Administration and Engineering Science

LeMoyne College
Any baccalaureate degree program with AA or AS in Liberal and General Studies, Business Administration, Engineering Science

Marist College
Parallel programs in Business (Marketing, Management) Accounting, Engineering Technology, (Civil, Electrical, Industrial and Mechanical)

St. John Fisher College
AA, AS degree programs, Liberal and General Studies, Business Administration, Engineering Science

Rochester Institute of Technology
AA, AS, AAS degree

SUNY College at Binghamton
Watson School of Engineering, Harpur College

SUNY College at Brockport
Business Administration, Criminal Justice, Liberal and General Studies and LGS Mental Health Emphasis degrees will be accepted in Brockport's Recreation and Leisure degree program

SUNY College At Cortland
Elementary Education, Computer Science

SUNY College of Environmental Science and Forestry
Biological Sciences
Chemistry
Landscape Architecture
Forest Engineering
Paper Science and Engineering Wood Products

SUNY College at Fredonia
AA degree into Business Administration or Liberal and General Studies or Radio and Television.
AS degree into Math, Physics, AAS in Child Care into Early Childhood Education

SUNY College At Oneonta
AAS in Accounting, Marketing, Management, Data Processing, And AS in Computer Science

SUNY College At Oswego
Business Administration

SUNY College at Plattsburgh
Any Associate Degree that leads to a baccalaureate program

SUNY College at Purchase
AA, AS degree programs in Liberal and General Studies

SUNY College of Technology (Utica)
AAS in Business, Electrical and Mechanical Engineering Technology, Industrial Technology, Nursing.
AS in Computer Science, Engineering Science, Liberal and General Studies.
AA in Liberal and General Studies.

Syracuse University
School of Management

Trinity College
AA, AS, AAS degrees, concentrates on Liberal and General Studies, Sciences, Business
Administration, Engineering Science

SUNY Health Science Center at Syracuse
Cytotechnology, Medical Technology, Physical Therapy

Utica College of Syracuse University
AA, AS graduates in following concentrations - Liberal and General Studies, Business Administration, Engineering Science

Wayneburg College
AS degree graduates accepted, transfer credits determined on individual basis

Wilkes College
Accounting, Business Administration, Computer Science, Liberal and General Studies, Nursing

Roger Williams College
AS degree graduates accepted. transfer credit determined on individual basis



GRADING INFORMATION

Because this grading policy went into effect for the Fall Semester of 1979, grades earned by students at the college prior to that date will remain as recorded.

Grades	Honor Points Per	Explanation
A	4	Outstanding achievement of course objectives
B	3	Significant achievement
C	2	Satisfactory achievement
D	1	Minimal satisfactory achievement
F	0	Failure to meet course objectives or dropped after 10th week
S	-	Satisfactory
U	-	Unsatisfactory
W	-	*Withdrawn from a course between the 4th and 10th weeks inclusive (See "W" Grade below)
I	-	Incomplete due to special circumstances (See "I" Grade next column)
IP	-	"In Progress"-for courses in which student is permitted more than one semester to complete.
AU	-	Audit
T	-	Transfer credit from an accredited college

"S", "U" AND "IP" GRADES

The S or U grade and IP grade will apply only to specific courses determined by the appropriate departments and approved by the Vice-President for Academic Affairs. Such courses will not affect the Grade Point Average (GPA).

*"W" GRADE

It is the student's responsibility to initiate action to receive a grade of W between the 5th and 10th weeks inclusive. If no action is taken before the 11th week and the course is dropped, an F (or U) will be entered on the transcript. For less than full semester courses, a proportional time to withdraw with a "W" grade will be determined. For example, 7 ½ week courses, an F (or U) will be entered on the transcript if the course is dropped after the 5th week. For 5-week modules an F (or U) will be entered on the transcript if the module is dropped after the 17th class. Students who withdraw from a class may not continue to attend that class.

"I" INCOMPLETE GRADE

A student who receives an I grade shall, within two weeks after the last class of that semester, contact his or her instructor to arrange for completion of unfinished work, in accordance with agreed upon time limits that are not to exceed one year. The instructor will then notify the registrar of the arrangements and after the student has completed the work, of the subsequent grade to be assigned. If the student does not meet the time limit, the instructor shall direct the registrar to record the appropriate grade.

If the student does not contact the instructor during the two-week period at the end of the semester, the registrar shall record the appropriate grade as directed by the instructor.

AUDIT

The term "Audit" shall not be considered a grade but and "opportunity." For persons auditing a course, the letters AU will appear next to the course name on the transcript with a message statement explaining the meaning of the designation. No grade shall appear in the grade column on the transcript.

Students are encouraged to use the option of taking courses on an audit basis. A student may not receive credit for it later, unless he/she re-registers in the courses or challenges it according to the existing rules for credit-by examination.

Students who register in a course for audit are expected to have the necessary prerequisites: In this respect students are encouraged to make full use of the College's counseling services, but the ultimate decision whether or not to enroll for audit shall be the student's responsibility. Consideration may be given to a student's request for transfer from credit to audit status or vice versa. The end of the third week of classes is the deadline for such transfer.

Full-time students may audit courses with no additional charge, but they need approval of their department chairperson. **For part-time students,** the regular tuition schedule applies (see page 12). New York State residents who are **60 years of age or older** may audit courses without charge on a space available basis.

MID-TERM GRADES

Only the D, I, F and U grades will be reported to students and their advisors at mid-term.

REPEATING COURSES

If a course is repeated, the higher grade will enter the grade point average. If a required course is failed, the department or the dean may allow the student to substitute an equivalent or similar course, rather than repeat the failed course. In such cases the higher grade will enter the grade point average. All grades will appear on student's transcript.

GRADE POINT AVERAGE

Each grade carries a specified number of honor points - 4 for an A, 3 for a B, 2 for a C, 1 for a D. To determine one's grade point average, multiply the number of honor points earned, according to the letter grade, by the number of credits for the course. Add these together and divide the sum by the total number of credits taken.

For purposes of graduation eligibility, only those courses required for the degree will be included in the calculation of the grade point average (GPA).

The GPA if fixed as of graduation and any courses taken after that will not change the graduation GPA and will not be entered into the previous GPA in any way. Cumulative GPA will reflect all courses that are not starred on the transcript.

PRESIDENT'S LIST AND DEAN'S LIST

Full-time students who have a semester grade point average 3.80 or better will be named to the President's List. Such students most successfully complete a minimum of 12 credit hours. Courses which use the S or U or credit equivalent grade may not be among the 12 hours.

Full-time students who have a semester grade point average between 3.50 and 3.79 inclusive will be named to the Dean's List. Such student must successfully complete a minimum of 12 credit hours. Courses which use the S or U or credit equivalent grade may not be among the 12 hours.

Part-time students can earn a place on the President's or Dean's List by having the appropriate cumulative grade point average for their most recent semesters that include at least 12 credit hours. Courses which use the S or U credit equivalent grade may not be among the 12 hours. Part-time students should contact the Registrar's Office if they have the appropriate grade.

GRADUATION WITH HIGH HONORS OR HONORS

Students who graduate with a cumulative grade point average of 3.80 or better will receive the distinction of graduating with "High Honors" and those who graduate with a cumulative grade point average between 3.50 and 3.79 inclusive will graduate "with Honors."

CREDIT EQUIVALENT

Some courses at Broome Community College carry "credit equivalents." This means that they do not give a student credit toward a degree at the college, but they are equivalent to the appropriate number of credits for one's academic load. This credit load is used, to cite some examples, for determining a student's status as full-time or part-time, for financial aid, for billing, and for academic standing. Four courses carry these equivalent credits for the 1987-88 college year - ENG 090 Basic Language Skills, MAT 090 Basic Mathematics Review, RDG 090 Reading Fundamentals, RDG 100 College Reading.

Credit equivalent courses will be shown on official college lists with "0"or "3" depending on whether the list is showing credits, as on a master schedule, or credit equivalents, as on a student's schedule or bill.

RETENTION

The college has begun a study to determine how many of its students eventually graduate either from Broome or other colleges to which they transfer.

Early indications show that the number of students completing academic programs at Broome is steadily rising, In recent years, the graduation rate is estimated to have exceeded 50%, covering all programs. In some fields, especially the engineering technologies, the graduation rate appears to be greater, reaching as high as 65% to 70% of the entering class.

Another survey of students receiving financial aid was completed in the spring 1984 and indicated even more positive outcomes, with 65% of students graduating from all programs.

POLICY OF STANDARDS FOR ACADEMIC PROGRESS

In order to be in good academic standing and to be making academic progress toward a degree or certificate, a student must meet a minimum cumulative grade point average and successfully accumulate credits according to the following standards:

1) GRADE POINT AVERAGE

Credits Attempted	Minimum Cumulative GPA
0-20	1.50
21-40	1.75
41-upward	2.00

2) SUCCESSFUL ACCUMULATION OF CREDITS

Students must successfully pass ("D" grade or better) a total number of credits according to the following standard:

Credits Attempted	Credits Completed
20	12
40	24
60	36
80	48
100	60

By the time a student has attempted 20 credits, he/she must have successfully completed 12 credits. Likewise, 40 credits trigger the 24 credit minimum requirement.

PROBATION

Student's records will be reviewed at the end of each semester. Students who have not met the minimum standards will be placed on probation. A student will have one dismissal. During this probationary time, the student is expected to follow a probation contract outlined with his/her advisor, department chairperson or division dean.

DISMISSAL FROM THE COLLEGE

If a student does not meet the minimum standards during the probationary semester, the student will be dismissed from the college after the probationary semester. If a student achieves a 2.00 semester grade point average and satisfies the accumulation of credits requirement while on probation, but fails to meet the minimum cumulative GPA, he/she will be given an additional semester of probation. Probation will continue as long as the student continues to achieve a semester grade point average of at least 2.00.

DISMISSAL REVIEW: Verified medical, psychological or personal reasons directly contributing to the student's academic failure may be considered by the divisional dean for a waiver of dismissal. In addition, the dean may reinstate students at his/her discretion based on recent dramatic improvements in performance but which still leave a student with cumulative credit or GPA deficiencies. This requires a petition to the dean.

REVIEW BASED ON SUMMER ENROLLMENT: Students are encouraged to take summer courses to improve their academic standing for the fall semester. Any student who enrolls in summer courses may request the dean or department chairperson of his/her program to review his/her probation or dismissal status prior to the start of the fall semester. The student must obtain documentation of his or her summer grades prior to this review.

READMISSION: To be eligible for readmission as a full-time matriculated student following dismissal, the student must take two courses (5 to 9 credits and/or credit equivalents) in one semester and receive at least a "C" in each course. These courses must be approved by the dean or department chairperson of the program to which the student is applying for readmission. Readmitted students are also required to meet with a member of the Counseling and Student Development Center (Wales Building, Room 200) for assistance on a regular basis as established by the student and the counselor.

DISMISSAL, READMITTANCE FOR DEGREE PROGRAMS

A student must demonstrate discernible progress toward the achievement of a degree in a given program of study. If a student fails one or more introductory courses in a major sequence, as determined by the department from that program of study-but not necessarily from the college.

To be considered for readmission to the program the student must meet with the appropriate department chairperson who will make the determination. Students must also meet with a counselor prior to being readmitted so that a program of assistance may by established by the counselor. The signature of the counselor must be on the petition form for readmittance. In the case of programs that have limited space for freshmen, the Admission Office shall notify the student of his/her readmittance into the program and adjust accordingly the number of spaces available for new freshmen. A maximum of 10% of the total number of available spaces for freshmen in a program may be used for readmitted students.

This policy applies to the following 11 programs - Dental Hygiene, Engineering Science, Medical Assistant, Medical Laboratory Technology, Nursing, the Office Technologies curriculums of Executive Secretary, Office Services Assistant, Word Processing and General Office Certificate, Radiologic Technology.

OTHER ACADEMIC REGULATIONS

ATTENDANCE REGULATIONS

Colleges throughout the nation have found that students who regularly attend classes have a better success record than students who do not regularly attend classes. With the intent of encouraging student success, B.C.C. strongly urges students to regularly attend their classes. In fact, the College's policy is that a student is expected to come to all class sessions prepared to participate in an appropriate manner. Absence from class is considered a serious matter and never excuses a student from classwork. A student must complete all assignments, examinations, and other requirements of any course to receive credit.

The college understands, however, that students sometimes through uncontrollable circumstances, are absent from classes. In these cases, the students need to meet with their instructors to discuss missed work.

SPECIFIC RESPONSIBILITIES

Student Responsibility: Class attendance is a measurable commitment by the student toward meeting individual responsibility for his/her own education. Should a student miss a class, it is the student's responsibility to make up any work regardless of reason for absence. Students should work with the instructor and/or the Counseling and Student Development Center to help resolve reasons for absences.

Instructor Responsibility: Each instructor is responsible for relating the significance of attendance to the course objectives and to inform the students of this significance in the first class meeting. When absences occur, instructors are encouraged to discuss reasons with the student. If the reasons are beyond the student's control, instructors are encouraged to discuss with the student ways to solve the problem, including referral to the Counseling and Student Development Center.

Department Responsibility: Within the spirit and framework of college policy, each department may develop its own guidelines to meet its needs. Such guidelines are subject to the approval of the Vice-President for Academic Affairs.

NOTE: Some developmental courses have strict attendance requirements, whereby students may be de-registered from the class for poor attendance. This de-registration may result in a loss of financial aid. The consequences of this may necessitate that the student return financial aid monies to the college. Consult course outline and/or instructor for further details.

STUDENT CHEATING

An instructor has the prerogative of failing a student who has cheated on an exam, quiz, paper, project, report, etc. for that exercise only. Students who cheat a second time risk failure for the entire course and additional disciplinary action, including the possibility of dismissal from college.

STUDENT ACADEMIC APPEAL PROCEDURE

Broome Community College has established a procedure to provide students an opportunity to appeal grades in any particular course(s) or academic dismissal. Copies of the Student Academic Appeal procedure are available in the offices of the Divisional Deans, and the policy also appears in the Student Handbook.

WITHDRAWAL FROM THE COLLEGE

Broome Community College has committed itself to a philosophy of providing whatever assistance is necessary to aid the student in completing his/her academic goals. Students are strongly encouraged to seek academic and personal counseling prior to any withdrawal.

Students who decide to withdraw from the college must complete the proper termination forms available in the Registrar's Office or Counseling Center. Failure to comply may cause the individual to lose any possible refund of fees.

The college reserves the right to administratively withdraw a student from course(s) for lack of attendance. The Registrar's Office coordinated this process.

LENGTH OF CURRICULUM

Most associate degree programs are designed to be completed in two years. The college year is divided into two semesters of 15 weeks each plus as evaluation week. Some students may choose or be required to take more than four semesters to earn their degrees. Radiologic Technology students, for example, have special clinical laboratory experiences in the summer of both their freshman and senior years.

REGISTRATION POLICY

Registration for credit courses will be permitted through the Friday of the first week of classes (each semester/summer term). To be registered is distinct from changing a student's course schedule through the drop/add process.

WITHHOLDING OF GRADES

Student's Grades will be withheld by the Registrar's Office for any semester in which there are outstanding financial or property-returning obligations. These could be to such college office as Security, Learning Resource Center (Library), Student Accounts, Physical Education, as well as others. Students must settle any such outstanding debts to the college and then present evidence of the settlement to the Office of the Registrar, after which their grades will be distributed.

INDEPENDENT STUDY

Many academic departments of the College offer "Independent Study" courses which are arranged between an individual faculty member and a motivated student. The student has the responsibility to make appropriate arrangements with a faculty mentor and to secure the permission of the department chairperson before registering for independent study.

A student may not take more than one Independent Study course per semester.

Independent Study courses are not intended to replace regular courses which the student was unable to schedule or which he/she did not complete. Rather, these courses provide an opportunity for the serious student who desires to expand his academic background beyond the scope and the depth usually found in a regular course. (See course description section for offerings.)

GRADUATION

Broome Community College will conduct one formal graduation ceremony each year in the spring. All candidates for degrees may participate in the ceremony. A candidate is a student who will complete his/her degree requirements at the conclusion of the spring or summer semester. Candidates must have declared their intention to graduate and have been recommended as candidates by the Chairperson of Academic Department. Students who complete their degree requirements at the end of the fall semester will be invited to attend the next graduation ceremony. The faculty will verify that students have fulfilled their academic requirements for degrees at the end of each semester.



THE CECIL C. TYRRELL LEARNING RESOURCES CENTER

The Cecil C. Tyrrell Learning Resources Center provides a wide variety of learning resources. Housed in the center are the Library, the Audio Visual Department, the Learning Assistance Center, and various specialized learning laboratories, as well as offices and classrooms.

A staff of professional, technical and clerical specialists offers the students a broad range of services designed to meet their academic needs. Typical library services include lending of materials, information services, access to other learning resource centers, interlibrary loan service, assistance in research techniques, and instruction in the use of materials and equipment. A coin operated photocopier is also available. Many library operations and services are computerized.

The learning Resources Center's primary function is to support and supplement the academic programs of the college and to provide a center for serious study, research and learning. Students are encouraged to use its facilities, materials, and services. Requests for assistance are welcomed by the staff.

The facilities have a capacity of nearly 800 users. Individual carrels, lounge furniture, multiple person tables and stools, and small group study rooms are available. Audio-Visual equipment including projectors, tape and record players, micro-film reader/printers, as well as more specialized machines, are located in the center for student use. Some typewriters and equipment for students with vision disabilities are also available.

The Learning Resources Center was constructed in 1967-68 and named for the College's founding president in 1972, the year he retired after 26 years in the position. The building is an attractive and modern three-story structure,with more than 40,000 square feet of space devoted to its learning facilities.

The Learning Resource Center collections offer many different types of print and nonprint materials carefully selected to meet the academic needs of students at college level. The print collections consist of nearly 70,000 books, 650 current periodicals and serials, plus over 10,000 pamphlets.

More than 3,000 audio recordings, slides, filmstrips, maps, microfilms, multimedia kits, and other types of media add several thousand more items to the collection. An extensive file of college catalogs in maintained.

Most materials including magazines may be borrowed for use outside the center, although some restrictions are placed on reference and reserve materials. The basic loan period for books is four weeks, and for magazines and audio visual materials, one week.

Some loan periods may be extended if requested before the date materials are due back in the center and the item is not in demand. Overdue fines are not charged as a rule, but the college reserves the right to do so with proper notification.

Library cards will be issued to students upon request, but are not required for borrowing materials. Proper identification is necessary, however. Failure to return borrowed materials promptly upon notice can result in withholding of grades, transcripts and other services.

Lost and damaged materials must be replaced or paid for at current replacement costs, and the borrower is responsible for all materials charged out on his/her card.

The center is open for full service during the following hours:

Fall and Spring Semesters
Monday-Thursday 8 am to 10 pm
Friday 8 am to 5 pm
Saturday 12 noon to 5 pm
Sunday 4 pm to 10 pm

Holiday and Intersession
Monday-Friday 8 am to 5 pm

Summer Session
Monday-Thursday 8 am to 10 pm
Friday 8 am to 5 pm

(The center is closed, however, on all days that the College is officially closed.)

ABSENCE DUE TO RELIGIOUS BELIEFS

Section 224-a of the State Education Law reads:

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he is unable, because of his religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.

2. Any student in an institution of higher education who is unable, because of his religious beliefs, to attend classes on a particular day or days, be excused from any examination or any study or work requirements.

3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.

4. If classes, examination, study or work requirements are held on Friday after 4 p.m. or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements held on other days.

5. In effectuating the provisions of the section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section.

6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his rights under this section .

6-a. A copy of this section shall be published by each institution of higher education in the catalog of such institution containing the listing of available courses.

7. As used in this section, the term "institution of higher education" shall mean schools under the control of the Board of Trustees of the State University of New York or of the Board of Higher Education of the City of New York or any community college.

PROGRAM-IDENTIFYING NUMBERS

State regulations require a listing of all curriculums, together with the degrees they lead to and their HEGIS code numbers. HEGIS stands for Higher Education General Information Survey, and the HEGIS numbers for each curriculum are official federal and state designations. Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain aid awards.

HEGIS	Degree	Curriculum
5001	CERT	Business Skills
5002	AAS	BUS-Accounting
5004	AS	BUS-Business Administration
5004	AAS	BUS-Marketing Management & Sales
5005	CERT	General Office
5005	AAS	BUS-Secretarial Science-Word Processing
5005	AAS	BUS-Secretarial Science-Executive
5005	AAS	BUS-Secretarial Sciences, Office Services Assistant
5010		Hotel and Restaurant Technologies
5008	AS	Communication and Media Arts
5012	CERT	Interior Design
5099	CERT	Paralegal Assistant
5099	AAS	Paralegal Assistant
5099	AAS	Travel and Entertainment
5101	AS	Computer Science
5101	AAS	Data Processing
5101	AAS	Computer Technology
5203	AAS	Dental Hygiene
5205	AAS	Medical Laboratory Technology
5207	AAS	Radiologic Technology
5208.10	AAS	Undergraduate Nursing
5213	AAS	Medical Record Technology
5214	AAS	Medical Assistant
5305	AAS	Chemical Engineering Technology
5306	AAS	Automotive Service Specialist
5309	AAS	Civil Engineering Technology
5310	AAS	Electrical Engineering Technology
5312	CERT	Industrial Technology
5312	CERT	Industrial Technology - Industrial Safety & Ocupational Hygiene
5312	CERT	Machinist Related Instruction
5312	AAS	Industrial Technology
5312	AAS	Industrial Technology - Industrial Safety & Occupational Hygiene
5312	AOS	Tool and Die Making
5315	AAS	Mechanical Engineering Technology
5404	CERT	Dietary Manager
5503	CERT	Child Care
5503	AAS	Child Care
5505	CERT	Criminal Justice
5505	AAS	Criminal Justice - Police
5507	CERT	Fire Protection Technology
5507	AAS	Fire Protection Technology
5609	AS	Engineering Science
5649	CERT	Liberal and General Studies
5649	AS	Liberal and General Studies
5649	AA	Liberal and General Studies
5699	AS	Individual Studies
5699	AAS	Individual Studies

NOTE-"CERT" means certificate, not a degree.



LEARNING ASSISTANCE CENTER

Department Chairman, Steven Natale
1st Floor Cecil C. Tyrrell
Learning Resource Center
Telephone 771-5038

Students entering college may not have the appropriate preparation for the Associate Degree they seek - for example, when a person changes careers, returns to school after several years, or needs to upgrade particular academic skills.

BCC's Learning Assistance Center is committed to helping students realize their goals regardless of prior academic preparation. The Center has courses and activities available for students and works closely with the Admissions and Financial Aid Offices, The Counseling and Student Development Center and Educational Opportunity Program personnel to provide a supportive environment for learning.

DIAGNOSTIC TESTING—The Learning Assistance Center administers three tests to every entering full-time student-in reading, writing and mathematics. Part-time students are also encouraged to take these tests.

COURSE PLACEMENT—The Learning Assistance Center uses the information gained from these tests to recommend and, in some cases require students to take developmental courses that are most appropriate to his/her program of study. Every effort is made to place students in courses in which they can succeed. Students with serious deficiencies will be required to enroll in appropriate non-credit courses.

DEVELOPMENTAL COURSES—Various courses are offered through the Center for those desiring skill improvement or review. Some of these carry credit; others do not. The non-credit courses listed below prepare students for credit level work in the basic skill areas of mathematics, writing and reading. These non-credit courses are equivalent in time to credit bearing classes and are applicable toward financial aid and athletic eligibility.

	Courses	Credit or Equivalent	Catalog Page
ENG 090	Basic Language Skills	0 or 3*	
MAT 090	Basic Math Review	0 or 3*	
RDG 090	Reading Fundamentals	0 or 3*	
RDG 092	College Prep Reading	0 or 3*	
RDG 094	College Vocab Skills	0 or 2*	
RDG 095	Language Arts/ Hearing Impaired	0 or 3*	

NOTE: MAT 090, RDG 090, RDG 092, RDG 094, and RDG 095 have strict attendance requirements, whereby students may be de-registered from the class for poor attendance. This de-registration may result in a loss of financial aid. Consult course outline and/or instructor for further details.



Other developmental courses are credit bearing. Students should pay close attention to catalog information pertaining to these courses and should consult their department chairpersons or Learning Skills personnel about the acceptability of credit in a particular degree program.

	Courses	Credit or Equivalent	Catalog Page
CHM 102	Preparatory Chemistry	4	
LRS 101	Study Management	.5	
LRS 102	Memory and Exams	.5	
LRS 103	Textbook Mastery	.5	
LRS 104	Listening and Notetaking	.5	
LRS 105	Learning Skills	2	
LRS 110	The Research Paper	1	
LRS 120	The Art of Thinking	1	
LRS 130	Intro to Micro-computers and Word Processing	2	
LRS 140	Intro to Dental Hygiene	0 or 2*	
PHY 100	Preparatory Physics I	4	
PHY 101	Preparatory Physics II	4	
SAC	Human Development Courses	2-3	

DROP-IN ASSISTANCE—Learning Assistance Center specialists help students with short-term academic difficulties, such as writing a term paper, reading a difficult textbook, or solving a complex math problem. The staff encourages students to drop in to the Center for this type of assistance.

TUTORING—When a student experiences more serious academic difficulty and is in danger of failing a course, he/she may apply to the Center for peer tutorial assistance.

Located in the Cecil C. Tyrrell Library, the Center is open from 8:30 a.m. to 4 p.m. In addition, evening hours are posted each semester. Detailed brochures describing the various programs are available at the receptionist's desk in the Center.

SPECIAL SERVICES PROGRAM

With an open door admissions policy, Broome attracts many students with varied needs. The Special Services Program provides assistance to a percentage of these students who have experienced difficulty in achieving academic success. The program is aligned under the Academic Affairs Division and works closely with the Learning Assistance Center.

The Special Services Program provides a variety of support services to students who qualify. These services include: academic advisement, tutorial assistance, diagnostic test interpretation, transfer information, referrals, notetaking and reading services for the handicapped, a peer counseling program, and other student services.

The office is located in the library, room 101, and is open from 8 a.m. to 5 p.m. Phone number 771-5150 (TTY).

BCC FOUNDATION

The Broome Community College Foundation, Inc, is a not-for-profit corporation that raises private funds to assist BCC students through grants, scholarships, and loans. It also helps students by supplying funds for programs and projects for which public dollars are unavailable or insufficient. Providing faculty development funds to help faculty members attend workshops and seminars and to take graduate courses is an example of the use of these social funds.

In addition to accepting direct cash gifts, the Foundation serves as the administrative conduit for all-in-kind gifts to the College Equipment, books and works of art are examples of material received by the College through the Foundation. All gifts to the Foundation, whether cash, securities or material, are tax deductible.

ALUMNI

The Broome Community College Alumni Association provides the link between the College and its alumni. Any former student may become a member by paying the modest lifetime dues of $25.

The Office of Alumni Affairs, which is located in the Wales Building (Room 107) serves as a liaison among the College, its faculty, administration and 20,000 alumni. The office coordinates the total alumni effort and works closely with the Alumni association Board of Directors.

Membership in the Alumni Association gives alumni the opportunity for group life insurance, travel programs, discount buying programs, as well as a variety of social and cultural activities throughout the year. The Association also helps fund the BCC NEWSLETTER which is sent to all alumni.

COUNSELING AND STUDENT DEVELOPMENT CENTER

The Counseling and Student Development Center provides many services for students, whether they are enrolled full-time or part-time, day or evening. Students can meet with counselors in a helpful and informal atmosphere as they seek to develop their potential, form realistic goals, and understand themselves emotionally and intellectually. The Center is equipped to help students:

1. Understand their basic needs in terms of social, vocational and emotional adjustment to the college setting.
2. Establish realistic educational goals and appropriate methods of achieving them.
3. Assess their strengths and weaknesses to enable them to more effectively deal with academic and personal problems.
4. Better understand their role and that of the College in the higher educational process.
5. Obtain information about transfer and career opportunities, as well as assistance with academic problems.
6. Grow in their personal development and determine appropriate values through instruction in human development courses.

The Counseling and Student Development Center, located on the second floor of the Wales Building is staffed by professional counselors. The Center is open from 8 a.m. to 8 p.m., Monday through Thursday, and 8 a.m. to 5 p.m. Friday during the academic year. Students should become acquainted with the Center by stopping in at their convenience or calling 771-5210 for an appointment. A special brochure is available at the Center, giving details about the services.

CAREER AND LIFE PLANNING

Broome Community College offers an opportunity for students to explore interests, strengths and values in both an individual and group setting. Knowing as much as possible about oneself is the first step in understanding goals related to self fulfillment and to the world of work. The Counseling and Student Development Center can help in the process of self-evaluation and has information on career possibilities, audio-visual aids, testing procedures and techniques used in the process of exploring career fields and making career decisions. Counselors work closely with the College's Placement Center staff in offering students a comprehensive approach to career planning.

PERSONAL COUNSELING

Counseling is available for students experiencing social, personal and family concerns. Counselors attempt to help students face problems with an holistic approach. Assistance is given in both direct and indirect ways, by exploring, understanding and dealing with tasks and crises related to the problems being experienced. Counselors may make referrals to appropriate community agencies, if that should be necessary and mutually agreeable. All counseling is strictly confidential.

ACADEMIC COUNSELING

Counselors are available to help students put their academic efforts into the proper perspective by analyzing their study, social and work habits to enable them to utilize their time in the most efficient way.

TESTING

The Counseling and Student Development Center offers students the opportunity to engage in a testing program. When appropriate, it can be arranged for a student to take a variety of tests including personality and interest inventories. Cognitive style mapping is also available to help students better understand their individual learning preferences. The tests can help students develop self awareness and improve their decision-making ability. The Counseling Center also administers the TOEFL and ACT tests among others that originate in the ETS offices.

HUMAN DEVELOPMENT COURSES

Courses are offered which provide students with an opportunity to examine their values, attitudes, beliefs and abilities. The courses also offer an opportunity to learn how these factors affect the quality of relationships with others. In addition, the students examine the challenge and problems of society as they relate to their development. All courses are transferable for credit. See page 77 for course descriptions.

ORIENTATION PROGRAM

Freshman, transfer or re-admitted students will have an opportunity to participate in various advising, counseling and orientation sessions as well as social and cultural activities prior to and during the semester of acceptance into the College. Information concerning these activities will be mailed to all students prior to the beginning of the semester.

The staff of the Student Affairs Division endorses the concept that a community college environment should facilitate the development of the whole student.

SPECIAL WORKSHOPS AND SEMINARS

The Center offers a variety of workshops and seminars throughout the college year. Those that have been offered cover such topics as relaxation techniques career exploration, cognitive style mapping, returning to college, and assertiveness training.

PROGRAM FOR PEOPLE OVER 60

Any citizen of New York State who is 60 years of age or more may "audit" courses at Broome Community College without charge, as long as there is space available. In this connection the word "audit" means these students take the course by attending classes and being exposed to all the work given in class and assigned in the text. They do not have to do the homework or take the examinations, however, and they receive no letter grade or college credit.

WOMEN'S PROGRAMMING

Broome Community College counselors are responsible to all students and, in particular, the women who make up more than 50% of the current student body. The women range in age from their teens to their 70's, with many of them returning to school after varying numbers of years away from the classroom.

Women can learn individually and in small groups how to begin a program, schedule it into their lives, and receive information, support and encouragement. The many counseling programs the center offers can help them achieve their academic goals, whether it be a few courses or a degree to transfer to a 4-year college or to find employment. Special topics of interest to women are also offered by Counseling Center Staff.

TDD/TTY TELEPHONES

A TDD/TTY telephone unit is available in the Counseling and Student Development Center to make it accessible for the hearing impaired. The number is 771-5210. The College also has one in the Admissions Office (771-5001) and the Educational Opportunity Program (EOP) Office (771-5109).

OFFICE FOR THE DISABLED

Counselor - James Gormley
Counseling and Student Center
Wales Building, Room 200
Telephone 771-5210 (Voice TDD/TTY)

In addition to regular student services on campus disables students entering college may receive special assistance. The Office for the Disabled provides these students additional help in achieving their educational goals.

Such services as interpreters, readers and notetakers are available, and adjustments for program accessibility like re-scheduling classes and elevator use ate also arranged. Through the Learning Resource Center and other departmental areas, students may obtain and use various aids as the Visualtek Machine, light magnifiers, tape recorders, projectors, large print reading materials and taped books.

It is strongly recommended that students complete a brief card regarding disabilities at orientation sessions or when coming to the campus in the fall. This voluntary self-identification is confidential but will enable the College to plan for student needs and provide better service.

A TDD/TTY telephone unit is available in the Admissions Office, the Counseling and Student Development Center, and the EOP (Educational Opportunity Program) Office to make them accessible to the hearing impaired. The respective numbers are 771-5001 and 771-5210 and 771-5109 (Voice TDD/TTY).

EDUCATIONAL SUPPORT SERVICES FOR DISABLED STUDENTS

Broome Community College is committed to meeting the support needs of its disabled students. However, auxiliary services such as notetakers, taped books, and special testing provisions require advanced planning to be implemented as smoothly as possible. The College urges any student who has need of educational support services to give the Coordinator for Disabled Students Services as much advanced notice as possible. This will allow Broome Community College to have quality support services in place at time of the student's needs. (Phone 771-5210 or write Counseling and Student Development Center, c/o Broome Community College).

In order to avoid the duplication of services and to assure that disabled students at Broome Community College receive all the auxiliary aids for which they qualify as speedily and as efficiently as possible, the College requires that any disabled student who is to receive college assistance attempt to enroll with appropriate federal and state agencies (e.g. the Office of Vocational Rehabilitation and the Veteran's Education Assistance Agency). The Coordinator for Disabled Students Services is available to assist any student who requests in applying to state and federal agencies.

TRANSFER TO 4-YEAR COLLEGES AND UNIVERSITIES

Broome Community College has developed a fine reputation for its successful preparation of students for study at senior institutions. Students desiring to continue their education are encouraged to consult with a counselor in the Counseling and Student Development Center, their faculty advisor, or department chairperson for assistance in selecting a program and/or institution that is appropriate to their goals abilities and aspirations.

To these ends, the College conducts the Transfer Emphasis Program, which consists of visits to the campus by representatives of four-year schools to recruit and advise potential transfer students. These visits occur each semester, and they are designed to expedite the information process, necessary to insure a smooth transition between community college and various four-year programs. The representatives, generally from admissions offices, discuss life on their campuses, financial assistance possibilities and activities available, in addition to the traditional explanations of all their academic programs.

Applications for the **State University of New York** colleges and university centers are available in the Counseling and Student Development Center. Students should apply directly to all **other colleges** (non-SUNY units) by requesting an application and any other pertinent data from the admissions office of the desired college.

All student should arrange at the BCC Registrar's Office to have copies of their transcripts forwarded to the admissions office of the colleges to which they are applying. This will insure proper transfer of applicable credits. Any requests for references and recommendations may be forwarded to the Counseling and Student Development Center, and all acceptances and rejections of applications should also be reported to the Center.

Any questions or problems regarding transfer should also be directed to the Counseling and Student Development Center. For information on special transfer opportunities, see pages 18 and 19.

STUDENTS FROM OTHER NATIONS

The College welcomes and encourages students from other countries to enroll and is authorized by the United States Department of Justice to issue necessary Certificates of Eligibility (Form 1-20). For admissions information, these students should contact the Admissions Office at Broome Community College, P.O. Box 1017, Binghamton, New York 13902, USA.

Although most programs at the college have different admission standards, as a minimum, international students and those



whose native language is not English are admitted to the College under the following conditions:

- -Demonstrate proficiency of the English language by (1) submitting official TOEFL scores of 400 or better or a Michigan Test score of 65 or better or (2) submitting official English language translation of transcripts from all secondary schools and colleges attended requiring at least 4 full years of English language. A TOEFL score of 525 will qualify a student for admission into any degree program, but a writing sample is administered prior to registration to determine the appropriate English course.
- -Submit TOEFL or Michigan Test scores if either of these tests of English language proficiency have been taken. Students whose native language is not English must also take a special language proficiency examination at the College before they are allowed to register for classes.
- -Provide an affidavit of financial support and a transcript in English (certified translation) of all secondary school or college work.
- -Show evidence of health coverage. Information on a state health plan will be sent to students upon acceptance to the College.
- -The College requires all new students to take an English and math examination to help identify the most appropriate course of study to meet their educational needs. These test must be taken before you can register for classes.
- -You cannot be considered for admission until all required items have been received.

No housing is provided for students at BCC. Some local residents list available housing with the College and students are responsible for making their own housing arrangements, although the International Student Advisor does assist in the process. It is estimated that College costs and living expenses approximate $7,000 per year.

The College provides an advisor to assist students from other countries in all areas of student life while at Broome Community College. Both academic and non-academic problems may be discussed with the advisor whose office is in the Wales Building, Room 210.

PLACEMENT

91% OF 1986 GRADUATES FOUND JOBS OR TRANSFERRED

- **91% of the 1986 Graduates** either found employment or transferred to 4-year colleges, thus enabling BCC to fulfill its two major missions of preparing graduates for immediate employment or transfer to 4-year colleges.
 - 48% of the graduates went to work.
 - .43% transferred to 2 and 4 year colleges or other technical programs.
 - 6% were unemployed at the time of the survey.
 - 3% unavailable for work.
- **Starting Salaries** of those who went to work averaged $14,378 a year and ranged from $7,000 up to $26,000. About 40% reported salary information.
- **1071 Graduates in Class of 1986** at Broome Community College, and 88% of them responded to survey. All statistics here are based on that 88% response.
- **Where They Went To Work:**
 77% of those who went to work found jobs in Broome County, with an additional 10% working elsewhere in the Southern Tier. In addition 4% got jobs elsewhere in New York State, and another 9% went outside of the state.
- **Where They Transferred To:**
 - 67% of those who are continuing their higher education transferred to colleges in the State University of New York (SUNY) system.
 - 19% to private colleges in New York State.
 - 14%to out-of-state colleges and universities.
- **Leading Employers, in order:**
 Large industries in NY State, such as IBM,Singer-Link, Corning Glass
 Hospitals and Nursing Homes in Broome County
 Retail Stores in Broome County
 Small to Medium industries in Broome County, such as Atlantic Design, Chenango Industries, Buckingham Mfg., Ramp Industries
 Day Care, Educational, and Non-Profit Organizations in Broome County
 Banks, Accounting, Investments and Insurance Agencies in Broome County
 Hospitals and Nursing Homes Out of State
 Physicians in Broome County
 Temporary Services Agencies and Job Shops
 Small Businesses in Broome County
 Restaurants and Fast Food Franchises in Broome County
 Hospitals and Nursing Homes in the Southern Tier.



- **Colleges to which BCC Graduates Transferred in 1986, in order:**
 SUNY Binghamton
 Rochester Institute of Technology
 SUNY College at Oswego
 SUNY College at Cortland
 SUNY Buffalo
 Clarkson University
 SUNY Albany
 SUNY College at Brockport
 SUNY College of Technology at Utica/Rome
 Virginia Polytechnic Institute

Most students who attend Broome Community College will eventually enter the labor market. Getting a job, particularly that first entry level position, requires an understanding of how to contact employers and what job hunting techniques provide the best employment success. The Placement Office not only helps students locate positions but offers assistance in resume writing and interviewing techniques.

The Placement Office lists full-time, part-time and seasonal jobs from employers who want to hire Broome Community College students and alumni. Most of these positions are related to academic programs at the College, and they are of particular value to students wishing to gain experience in their chosen field. The New York state Employment Service "Job Bank" and employment counselor are also available on a daily basis in the Placement Office (Wales Building, Room 201).

The quality of the College's academic programs is well known by many companies both locally and nationally. During the spring semester of every year, representatives of business and industry visit the campus to interview potential graduates for employment purposes. Students wishing information regarding this recruitment program should contact the Placement Office by November 1.

Individual appointments can be made to discuss job market predictions, salary expectations, and other questions related to employment.

PLACEMENT FOR CLASS OF 1986

THE ACADEMIC AREAS

BUSINESS—334 graduates, 54% employed, 7% unemployed, 36% transferred, 3% unavailable for work. Salary information - $11,223 average, $7,000 to $16,000 range.

COMPUTER STUDIES—96 graduates, 38% employed, 7% unemployed, 52% transferred, 3% unavailable for work. Salary information - $14,775 average, $14,600 to $18,100 range.

HEALTH SCIENCES—149 graduates, 78% employed, 3% unemployed, 12% transferred, 7% unavailable for work. Salary information - $16,104 average, $8,320 to $26,000 range.

LIBERAL ARTS—177 graduates, 22% employed, 3% unemployed, 73% transferred, 2% unavailable for work. Salary information - $10,700 average, $9,000 to $12,000 range.

TECHNOLOGY AND ENGINEERING—242 graduates, 42% employed, 8% unemployed, 50% transferred, 0% unavailable for work. Salary information - $17,136 average, $9,360 to $22,000 range.

SPECIAL CAREER PROGRAMS—83 graduates, 58% employed, 1% unemployed, 39% transferred, 1% unavailable for work. Salary information - $12,643 average, $10,000 to $15,500 range.

CURRICULUM

Following is a summary of each curriculum of BCC's six academic areas in which there were graduates last year. Percentages are based on number of graduates responding, not total number.

BUSINESS

ACCOUNTING—62 graduates, 60% employed, 6% unemployed, 29% transferred, 6% unavailable for work. Salary information - $10,211 average, $7,000 to $14,000 range.

BUSINESS ADMINISTRATION—100 graduates, 24% employed, 6% unemployed, 70% transferred, 0% unavailable for work. Salary information - $11,240 average, $8,320 to $15,000 range.

MARKETING MANAGEMENT—75 graduates, 64% employed, 8% unemployed, 25% transferred, 2% unavailable for work. Salary information - $12,308 average, $10,500 to $16,000 range.

MARKETING SALES—34 graduates, 59% employed, 7% unemployed, 33% transferred, 0% unavailable for work. Salary information - $11,040 average, $8,320 to $15,000 range.

OFFICE TECHNOLOGIES (ENGINEERING SECRETARY)—1 graduates, 100% employed. Salary information not available.

OFFICE TECHNOLOGIES (EXECUTIVE SECRETARY)—38 graduates, 83% employed, 6% unemployed, 6% transferred, 6% unavailable for work. Salary information -$11,469 average, $7280 to $14,700 range.

OFFICE TECHNOLOGIES (OFFICE SERVICES ASSISTANT)—18 graduates, 75% employed, 13% unemployed, 6% transferred, 6% unavailable for work. Salary information - $10,386 average, $8,463 to $12,480 range.

OFFICE TECHNOLOGIES (WORD PROCESSING) —6 graduates, 67% employed, 17% unemployed, 0% transferred, 17% unavailable for work. Salary information not available.

COMPUTER STUDIES

COMPUTER SCIENCE—54 graduates, 23% employed, 8% unemployed, 64% transferred, 6% unavailable for work. Salary information not available.

COMPUTER TECHNOLOGY—15 graduates, 64% employed, 7% unemployed, 29% transferred, 0% unavailable for work. Salary information - $14,600 average, $10,400 to $18,100 range.

DATA PROCESSING—27 graduates, 59% employed, 5% unemployed, 36% transferred, 0% unavailable for work. Salary information - $15,067 average, $11,000 to $18,000 range.

HEALTH SCIENCES

DENTAL HYGIENE—20 graduates, 85% employed, 0% unemployed, 15% transferred, 0% unavailable for work. Salary information - $17,551 average, $15,300 to $20,800 range.

MEDICAL ASSISTANT—12 graduates, 90% employed, 0% unemployed, 0% transferred, 10% unavailable for work. Salary information - $9,817 average, $8,320 to $10,566 range.

MEDICAL LABORATORY TECHNOLOGY—13 graduates, 31% employed, 0% unemployed, 46% transferred, 23% unavailable for work. Salary information not available.

MEDICAL RECORDS TECHNOLOGY—11 graduates, 64% employed, 0% unemployed, 27% transferred, 9% unavailable for work. Salary information - $14,161 average, $12,376 to $18,000 range.

NURSING—74 graduates, 85% employed, 5% unemployed, 5% transferred, 6% unavailable for work. Salary information - $17,413 average, $12,000 to $26,000 range.

RADIOLOGIC TECHNOLOGY—19 graduates, 89% employed, 6% unemployed, 6% transferred, 0% unavailable for work. Salary information - $16,322 average, $14,144 to $18,304 range.

LIBERAL AND GENERAL STUDIES

ASSOCIATE IN ARTS DEGREE—151 graduates, 21% employed, 3% unemployed, 74% transferred, 2% unavailable for work. Salary information - $10,500 average, $9,000 to $12,000 range.

ASSOCIATE IN SCIENCE DEGREE—7 graduates, 0% employed, 0% unemployed, 100% transferred, 0% unavailable for work. Salary information not available.

MENTAL HEALTH EMPHASIS—19 graduates, 31% employed, 6% unemployed, 56% transferred, 6% unavailable for work. Salary information not available.

TECHNOLOGY AND ENGINEERING

CHEMICAL ENGINEERING TECHNOLOGY—19 graduates, 63% employed, 11% unemployed, 26% transferred, 0% unavailable for work. Salary information - $17,676 average, $9,360 to $20,852 range.

CIVIL ENGINEERING TECHNOLOGY—12 graduates, 58% employed, 0% unemployed, 33% transferred, 8% unavailable for work. Salary information - $13,993 average, $13,000 to $15,000 range.

ELECTRICAL ENGINEERING TECHNOLOGY —70 graduates, 59% employed, 15% unemployed, 26% transferred, 0% unavailable for work. Salary information - $18,556 average, $9880 to $22,000.

ENGINEERING SCIENCE—73 graduates, 3% employed, 0% unemployed, 97% transferred, 0% unavailable for work. Salary information not available.

INDUSTRIAL TECHNOLOGY—30 graduates, 80% employed, 16% unemployed, 4% transferred, 0% unavailable for work. Salary information not available.

MECHANICAL ENGINEERING TECHNOLOGY—34 graduates, 44% employed, 3% unemployed, 53% transferred, 0% unavailable for work. Salary information - $17,440 average, $15,000 to $20,400 range.

TOOL AND DIE MAKING—4 graduates, 75% employed, 25% unemployed, 0% transferred, 0% unavailable for work. Salary information not available.



SPECIAL CAREER PROGRAMS

EARLY CHILDHOOD EDUCATION—19 graduates, 76% employed, 0% unemployed, 24% transferred, 0% unavailable for work. Salary information - $10,750 average, $10,000 to $11,000 range.

CRIMINAL JUSTICE—21 graduates, 56% employed, 6% unemployed, 38% transferred, 0% unavailable for work. Salary information not available.

FIRE PROTECTION TECHNOLOGY—1 graduate, 100% employed. Salary information not available.

INDIVIDUAL STUDIES (AAS)—8 graduates, 50% employed, 0% unemployed, 50% transferred, 0% unavailable for work. Salary information not available.

INDIVIDUAL STUDIES (AS)—18 graduates, 23% employed, 0% unemployed, 69% transferred, 8% unavailable for work. Salary information - $13,750 average, $12,000 to $15,500 range.

INDUSTRIAL SAFETY AND OCCUPATIONAL HYGIENE—4 graduates, 75% employed, 0% unemployed, 25% transferred, 0% unavailable for work. Salary information not available.

PARALEGAL ASSISTANT—12 graduates, 67% employed, 0% unemployed, 33% transferred, 0% unavailable for work. Salary information not available.

STUDENT AFFAIRS

Student affairs at Broome Community College fall within three primary areas of responsibility - student development, student services, and student management.

Student Development responsibilities include counseling, international student affairs, academic advisement, testing, freshman orientation, student activities, intercollegiate athletics, drug abuse education, leadership training, career development, veterans advisement, personal development courses, and transfer advisement.

Student Services cover admissions, financial aids, placement and health services.

Student Management concerns itself with student discipline, rights, responsibilities, judicial system and grievance procedures.

A comprehensive statement outlining the College's code of student conduct and student rights and responsibilities is available in the office of the Vice President for Student Affairs in Room 202 of the Wales Building. Students are welcome to examine it.

EDUCATIONAL OPPORTUNITY PROGRAM (EOP)

The Educational Opportunity Program is designed for students who are economically disadvantaged. It provides economic aid and remedial and developmental assistance, with the amount of financial aid based on need. Students who do not require financial assistance under this program may benefit from the educational services offered by EOP. To be funded by EOP, students must provide appropriate income information, and all students must be New York State residents as this is a state program. The EOP Office at the College is located in Room 111 in the Wales Building.

LIVING ACCOMMODATIONS

The college has no dormitory facility and assumes no responsibility for student housing. As a service to students the Student Activities Office maintains an up-to-date record of housing accommodations which landlords submit as being available. Copies of the housing list may be obtained by contacting the secretary in the Student Activities office located in the Student Union. The listing is neither an approval nor rating by the college, not will the college become a third party in any arbitration between students and landlords. Housing arrangements must be made directly by students and parents with local landlords.



HEALTH SERVICE

The college provides a Health Service which is available to all students at no additional charge for services rendered on campus.

Professional staff includes a full time nurse practitioner, a physician available two mornings a week for three hours, and one registered nurse on duty during regularly scheduled class periods.

The Health Service is located in the Wales Administration Building, Room 104, and is available 8:30 a.m. to 4:30 p.m., Monday through Friday. All records are confidential, and information will be released only with the written authorization of the student.

SERVICES:

- Treatment of illnesses and injuries.
- Medical emergency care
- Athletic physicals for varsity sports.
- Blood pressure and vision checks.
- Pap tests by appointment.
- Pregnancy Testing.
- Referrals to local physicians, specialists, dentists, clinics, hospitals.
- Allergy injections - medication to be supplied by student.
- Tetanus and PPD-Mantoux injections.
- Birth control information and counseling.
- Self Care Cold Center.
- Diet and weight control.
- Free pamphlets pertaining to various health matters.
- Tests for strep throat, mononucleosis, diabetes, anemia and urinary problems.
- STD detection.
- Health education programs on campus.
- Insurance - Processing of accident insurance claims, as well as information regarding insurance claims, as well as information regarding international student health insurance and optional sickness plan.
- Counseling and assistance with personal academic and health problems with appointment referrals within the college community.
- Emergency squad composed of students who assist the Health Service in bringing quick, efficient aid in time of emergency. Students are encouraged to become active in this important function on campus.
- Monthly Newsletter with timely hints to assist students to assume responsibility for their own health care.

STUDENT ACTIVITIES

The Student Activities Program at Broome has grown out of a conviction that education is not restricted to scheduled classes, that the hours outside of the classroom are of major importance, and that the Student Activities Program can give a new dimension to education. This program offers a variety of social and cultural experiences and opportunities for the development of social growth, moral values, appreciation and insights.

In recognizing the existence of the other half of college life, the college actively supports a co-curricular activities program that is funded by the student activity fee paid each semester. the Student Activities area represents one phase of campus life in which the students can and do have a voice in management and programming. The diversity of students interests is reflected in the many active clubs and organizations on campus. Involvement in the Student Activities Program provides students with the opportunity to develop leadership abilities.

Credit can be earned for participating in some of these co-curricular activities. Students should check with their advisors for further information concerning these credits.

STUDENT GOVERNMENT ASSOCIATION

The official organization of student representation on the Broome Community College campus is the Student Government Association. Student membership consists of five officers and thirteen senators who are elected yearly. The remainder of the senate is comprised of one representative from each of these support areas: Program board, Clubs Council, and Intercollegiate Athletic Advisory Council. All BCC students are welcome to attend meetings and become involved with SGA committees and activities. The SGA holds regularly scheduled meetings to discuss all issues concerning students. These issues are then presented to the appropriate faculty, staff or administrative area. A Student Trustee sits on the College Board of Trustees as a voting member and presents information of student interest to this body.

Student Government Association fulfills many student responsibilities on campus. It regularly reviews college policy and makes recommendations to the College Administration. Representatives of the SGA serve on the Faculty-Student Association. The operation of the student government is important to students and puts students ideas and viewpoints into action.

PROGRAM BOARD

One of the most active organizations on campus is the Program Board. Dances, Broadway, road shows, Spring Picnic, noon-hour programs, featuring famous artists and speakers, convocations and cultural events both on and off campus are the products of the programmer's efforts. This board is a voice of the campus in selecting the kinds of entertainment performed. The board is composed of student, faculty, and administrative representatives.

CLUB COUNCIL

The body that represents most of the 32 clubs on campus is Club Council. This council meets twice monthly with one representative from each club forming the Senate body. If a club or organization is not represented on campus, students can visit Club Council for information on starting one.

STUDENT CENTER

One of the busiest buildings on the Broome Community College campus is the Student Center. It houses the gymnasium, the College Cafeteria, Book Store, and the Little Theater, and many of the social events are held here. This building is used by day and evening students of all curriculums.

MEDIA BOARD

Fulcrum (campus newspaper) offers a variety of information for the students. It speaks out on important issues, offers the humorous side of student life, and gives the students a chance to voice their opinions through editorials and human interest stories.

Citadel (the yearbook) provides an opportunity for students to work on a more lasting project and to cover the entire college year in words and pictures.

Audio-Media Organization is for students who want to be involved in live broadcasting. WBCR Campus Radio provides an opportunity to learn about the different jobs in radio while working for an actual closed circuit radio station. WBCR provides the college community with music, information and special station-sponsored events. Members learn to be DJ's to program music, to coordinate a show and to market "air-time."

THE STUDENT UNION

The Student Union is for students to enjoy during their leisure hours on campus away from the books. From eight in the morning until five in the evening, the Union provides diverse recreational activities. Electronic games, ping pong, pool foosball, and pinball are available for play and relaxation. The Union provides a lounge for playing chess or cards, a video projector for viewing TV and feature films daily and, of course, vending machines.

The Union houses many organizations on campus including the newspaper, yearbook. Programming office, Student Government and also the Student Activities Office. The door to this last office always remains open for the student's personal joint input about the activities held on campus.

CURRICULUM AFFILIATED ORGANIZATIONS

In addition to the student organizations listed above that are affiliated with professional societies, the College has a number of associations that are identified with specific curriculums. Among these are Accounting Club, Business Club, Chemistry Club, Civil Technology Association, Computer Club, Dental Hygiene Assoc., Future Secretaries Assoc., Medical Records Club, Citadel (yearbook), Fulcrum (newspaper), Institute of Electrical & Electronics Engineers, Society of Manufacturing Engineers, Student Nurses Assoc., Lively Arts from the Liberal Arts curriculum, and the Student Organization of Radiologic Technologies.

OTHER CLUBS

In addition to the co-curricular activities listed on this page and the next one, other organizations are active on campus. These include:

Adult Club
Aviation Club
Camera Club
Campus Bible Fellowship
Campus Ministry
Cheerleaders
Circle K
Phi Theta Kappa
International Student Organization
Outing Club
Ski Club
Students With Different Abilities
Third World Organization

These are open to all full-time and part-time students. Details are available in the Student Handbook and from the Director of Student Activities.

PERFORMING ARTS

THEATRE/BCC

Complementing the studio and academic course work in theater is the group known as Theatre/BCC. All students are invited to participate, whether or not enrolled in formal course work.

Theatre/BCC enjoys a fine artistic reputation, presenting a broad range of theatrical styles, and provides its actors/technicians with varied opportunities for ensemble as well as individual training. Theatre/BCC provides a challenging and exciting experience for students with an interest in the theater, and most of its productions are performed in the intimate setting of the College's Little Theater.

NOTE: Students may receive transferable credit for active participation in College Choir, the Instrumental Music Association and Theatre/BCC. The conditions for this credit are available from one's advisor.

MUSIC

College Choir is sponsored jointly by the Liberal Arts Division and Student Government Association. Choristers have gained an excellent reputation and are exposed to a broad range of choral literature reflecting the varied demands for community concerts. The chorus traditionally produces an annual performance on Handel's Messiah and an annual Spring Concert, as well as performing for local church and civic organizations. The College Choir makes an annual concert tour to such places as Washington, D.C. or Williamsburg, VA. Rehearsals are held weekly and all students and staff as well as community signers are welcome to join this very active group.

The **Music Association** offers students who have previously played instruments the chance to continue their involvement in small ensembles (brass, woodwind and string) and the College Stage Band. A limited program of private coaching is also available.



BCC Jazz Ensemble offers instrumentalists a chance to perform jazz and jazz-rock on campus, and on tour. Its members strive for high quality performing and the enjoyment of working together toward this goal. A group of eight singers is used for popular arrangements with the band.

Improvisation, beginning and intermediate piano, beginning guitar reading classes are available to BCC students.

The Theater and Music Programs have joined in musical theater productions. Any BCC students who are interested may audition for performance on stage or in the orchestra.

PROFESSIONAL SOCIETY AFFILIATES

Since exposure to organizations in their fields of study is considered of benefit to students, many curriculums have their own affiliated of national professional societies. Among these are:

Society of Manufacturing Engineerings (SME) for Mechanical Engineering Technology and for Tool and Die Making students.

Dental Hygiene Association, an affiliate of the American Dental Hygiene Association.

Institute of Electrical and Electronics Engineers (IEEE) for Electrical Engineering Technology students.

In addition, some meetings of local professional societies are attended by students, such as the **American Chemical Society,** which invites Chemical Engineering Technology students to its meetings. Some professional societies hold meetings on campus, too, and students are always welcome to attend. Thus students have the opportunity to become acquainted with professional people in their fields of study and to attend lectures and see films and demonstrations of new developments.

HONOR SOCIETIES

Phi Theta Kappa

In 1962, the Mu Eta Chapter of th Phi Theta Kappa was established at the College. Phi Theta Kappa is a national honor society at two-year colleges, similar in purpose to Phi Beta Kappa at the four-year colleges and universities. Mu Eta Chapter is open to freshman and seniors at Broome CC who have achieved outstanding academic grades.

Sigma Phi Alpha

The national dental hygiene honor society, Sigma Phi Alpha, has a chapter at Broome CC, The Upsilon Chapter. Senior Dental Hygiene students who rank highest in scholarship and who exhibit potential qualities for future growth and attainment are selected for membership.

Tau Alpha Pi

The national honor society for students in engineering technology programs, Tau Alpha Pi has established a chapter on the Broome Community College campus. It is the Beta Theta Chapter. This society recognizes academic achievement in BCC engineering technology curriculums in Electrical, Civil, Chemical and Mechanical Technology.

ATHLETICS

INTRAMURALS

Physical activity is a vital part of an individual's life, regarding less of physical capability. With this in mind, the Student Affairs Division and the Physical Education Department coordinate an intramural program for all students enrolled at the College. Students are invited to participate in team sports such as Touch football, Soccer, Gym hockey, basketball, Volleyball and Softball. For those interested in individual competition or "Play for fun," sports such as tennis, golf, badminton, horseshoes and bowling are also offered. Students participating in intramurals should have a health questionnaire on file with the college Health Service. Forms are available in the Health Service (Wales Building, Room 104).

WOMEN'S SPORTS (Intercollegiate)

Broome Community College fields women's teams in five varsity sports - tennis, cross country, volleyball, basketball and softball - and they have achieved some fine success in recent years.

One of the cross country runners participated in the National Tournament in Hutchinson, Kansas in 1983; the tennis team has captured several individual and team regional titles in recent years and participated in the Nationals in 1983 and 1984 in Ocala, FL; after being the runner-up in the Region III Tournament in 1982, the volleyball team captured first place in 1983 and 1984 and played in the Nationals. Furthermore, both the basketball and softball teams have had excellent records in recent years. Cheerleading is also available for women.

MEN'S SPORTS (Intercollegiate)

Broome Community College fields men's teams in eight varsity sports - cross country, soccer, wrestling, basketball, ice hockey, tennis, golf, baseball.

BCC athletic teams have an excellent reputation in two-year college competition. Included in the basketball team's more than 876 victories are 10 regional titles. Coach Dick Baldwin became one of the first inductees into the National Junior College Basketball Hall of Fame, and he is the winningest college basketball coach in the country. The tennis and baseball teams have also been successful in regional competition, and in 1983 the baseball team was the regional champion.

The golf team has also been a recent Region III winner, capturing the team championship in 1981, 1984 and 1985.

The soccer team too has been good enough in recent years to be invited to post-season competition and the ice hockey team, has been ranked in the top five nationally in recent years, and has had two junior college all-Americans.

BOOK STORE

The College Book Store, or Campus Store as it is sometimes referred to, it located in the Student Center and actually has two areas of operation - The Textbook Store and the Campus Shop.

In the Textbook Store students may purchase their required books. To avoid standing in long lines the first week of classes, students are urged to purchase their books during the advance sale period, which is the week preceding the start of classes in both the fall and spring semester. Books are not available prior to this advance sale period. It is advisable to purchase all required textbooks early in the semester. In addition to the obvious reason of using them for studying, all unsold books must be returned to the publisher shortly after the semester begins.

The Campus Store offers variety of items, in addition to such classroom supplies as notebooks, paper, pens and binder, there are art and drafting materials, imprinted gift items and sportswear.

Students who have any special problems, suggestions or requests should feel free to contact store management.

FACULTY-STUDENT ASSOCIATION

The Faculty-Student Association of Broome Community College, Inc., is an educational corporation designed to provide to the College, and particularly to the students and faculty, services that are not included in the regular College budget.

It provides the corporate organization through which the student fees are expended under a budget prepared by the Student Government Association. It also operates a variety of auxiliary services including the College Book Store and food vending and child care.

The FSA earnings augment student fees to support new or special activities. The association is governed by a board of directors elected by members who hold certain offices on campus. The operating philosophy is to make the educational program outside the classroom a well-rounded supplement to the students' academic experiences.

ABOUT BROOME COMMUNITY COLLEGE

BCC
Broome Community College

Broome Community College is a comprehensive community college. It has programs designed to prepare graduates for intermediate employment and for transfer to four-year colleges and universities the at the junior, or third year, level.

In addition to its daytime enrollment of about 3,500 full-time students last year, the college has a sizable and number of part-time students. There were about 3,000 in the evening program last year and more than 2000 took courses during the Summer Session.

The College is co-educational, publicly-supported, and has historically attracted about two-thirds of its student body from Broome County and one-third from outside the county. The ratio has recently been closer to 80% and 20%.

The day student body can be classified into six parts, based on study objectives—the business programs, engineering and engineering technology cirriculums, health science courses, liberal arts programs, computer studies, and special career offerings.

The College is sponsored by Broome County, supervised by the State University of New York, and accredited by both professional and educational organizations (see inside front cover). Its programs, moreover, are registered with the State Education Department.

THE CAMPUS

The College campus is located three miles north of Binghamton on Upper Front Street, which is Route 11 and Route 12 at this point running alongside of Interstate 81. Nine of the 12 buildings form two contiguous quadrangles to make a compact campus layout.

Most of the buildings are two stories high, of modern functional design, and made of brick with colored panelwall facing. They lie in a suburban setting in the virtual center of the College's 120 acres of land.

Classes are held at the Nimmonsburg Center, one mile north of the campus on Front Street.

In addition to classrooms and laboratories, the campus has its own cafeteria, gymnasium and athletic fields and a Little Theater ..These facilities add up to make the campus a multi-million dollar investment in the youth of Broome and surrounding counties.

THE COMMUNITY

The community is an industrial and agricultural area in New York State's Southern Tier. It is in the approximate center of the state, measuring from east to west, and its southern extremity touches the Pennsylvania state line.

Binghamton has a population of about 55,000 and Broome County's population exceeds 200,000. Diversified industry in the community includes such firms as IBM, General Electric, The Link Division of Singer Co., Savin, New York State Electric and Gas Corp., Universal Instruments and Endicott Johnson.

The College has become an integral part of the community since it was started in 1946. Many of the campus facilities are offered at nominal cost for use by responsible organizations, and most of the College's curriculums are designed to help fill the economic needs of the county.

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CAMPUS CARILLON

The College has a Maas-Rowe symphonic carillon, which tolls the hours with chimes and occasionally plays musical selections through its automatic music roll attachment. The carillon was a gift to the College, donated by the College Foundation.

HISTORY OF THE COLLEGE

The College graduated its first class in 1949. These students had entered what was then known as the New York State Institute of Applied Arts and Sciences at Binghamton in the fall of 1947. The original institute was one of five founded in the state in 1946, following the pattern of six agricultural and technical institutes which New York had established earlier in the century. The first programs offered were all occupational in nature and included Chemical, Electrical and Mechanical Technology, as well as Medical and Technical Office Assistant curriculums.

In 1953 New York relinquished operating control of the school to a new sponsor, the County of Broome, under provisions of the State Community College Law, and the name was changed to Broome County Technical Institute. In 1956 the name was again changed to Broome Technical Community College, to reflect the increasingly comprehensive nature of the educational offerings. In 1971 the name became Broome Community College as the scope of curriculums continued to expand.

The Civil Technology program was added to the five original curriculums in 1957, Dental Hygiene was introduced in 1956, and the Business programs were expanded to include offerings in Accounting, Marketing, Engineering Secretarial in the early 1960's.

A big change in the College's program began in the late 1950's as a result of a new emphasis on university-parallel or transfer programs to go along with the college's occupational offerings. Engineering Science, the first two years of an engineering program, was introduced in 1958, Liberal Arts and Sciences (now Liberal and General Studies) in 1962 and Business Administration in 1963

In the late 60's interest began to develop in the health science field. As a result, the College introduced a degree-granting program in X-Ray Technology in 1965, added Medical Laboratory Technology in 1966, Nursing a year later, and the Medical Record Technology in 1969. The College was responding to the changing needs of the area and adjusting its offerings to fulfill the mission of catering to the post-high school educational needs of the community.

Criminal Justice and Child Care have been added since, and degree programs in Individual Studies and in Industrial Safety and Occupational Hygiene have also been introduced, along with Office Services Assistant. Additional new offerings have more recently been added in Computer Studies and in Tool and Die Making. A program in Word Processing was added in 1984-1985.

For its first five years, the school was housed in a refurbished State Guard Armory in downtown Binghamton. This building is located across from the Forum and was gutted by fire in September 1951. For the next five years, Kalurah Temple (now the Church of God building on Washington Street) and two other buildings in the city provided temporary quarters. In 1957 the College moved to its present campus just north of Binghamton. The first addition to the original campus came with the construction of Titchener Hall which was dedicated in 1963. The Library Building was completed five years later, and the Business Building opened in 1972.

A new Applied Technology Building has been completed and opened for classes at the beginning of the 1987 Spring Semester, the Science Building has been enlarged, and expansion of the Student Center is also underway.

PROGRAMS OF STUDY BY CURRICULUM

The academic programs, whose display of courses appears on pages 34 to 66, are designed primarily for full-time students of the College. It is possible, however, for one to study for an associate degree in any of these curriculums on a part-time basis. To do this, one should contact the appropriate department chairperson. The College's programs that are intended mainly for part-time appear on pages 67 to 75.

BUSINESS

The Department of Business offers programs in six areas of study -Accounting, Business Administration, Marketing/Management, Real Estate, Travel/Tourism and Hotel/Restaurant Technology. In addition, the accounting curriculum offers an emphases in banking, and the marketing/management curriculum offers emphases in marketing, management, retail management, and entrepreneurship. These programs were planned with the assistance of advisory committees made up of individuals currently working in the various areas of business involved. To assist the incoming student in selecting the proper option, all have a common first semester. Thus, the student can delay selection of a program until registration for the second semester. During the first semester of study, all full-time students will be assigned an advisor to assist them in selecting a program and appropriate courses.

Cooperative work experience is available to many business students. This offers the student first hand practical experience and college credit.

Programs in Accounting, Marketing, Management, Travel/Tourism, Entrepreneurship, Banking, Retail Management and Hotel Technology: Hotel/Restaurant Management are career oriented and designed to prepare the graduate for immediate employment. Many opportunities exist locally for careers in most of these fields. In others, such as Travel/Tourism, even greater employment opportunities exist outside of the area. The student should note that, although these programs are not designed specifically for transfer, they do provide good transfer opportunities to many four-year colleges and universities. Many four-year schools will accept graduates of these programs at full junior status.

The Business Administration program is designed to facilitate transfer to four-year colleges and universities. If the proper elective sequences are followed, this option will allow the student junior status at almost all four-year schools. As soon as students identify the school to which they wish to transfer, they should contact that institution to determine exactly which courses are acceptable for transfer. The student should then use this information in selecting the proper electives. *It is of the utmost importance that students confer with their advisor before choosing electives.* The department of Business also offers certificates of competency in Marketing, Management, Accounting, and other areas. See the Academic Advisor for information regarding these.

DEPARTMENT CHAIRMAN, RICHARD P. BEHR
Business Building, Room 107
Telephone 771-5133

ACADEMIC ADVISING
Business Building, Room 105
Telephone 771-5174

COORDINATORS
John Bunnell and Thomas Kanick
Business Building, Room 103
Telephone 771-5171

Stanley Lee
Business Building, Room 218
Telephone 771-5143

ACCOUNTING

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	2	0	2
		15	0	15

*Depending on Mathematics entrance testing scores, the student will take: MAT 090A and QBM or QBM or Free Elective

Spring Semester

BUS 101	Accounting II	4	0	4
BUS 120	Business Law II	3	0	3
BUS 211	Business Appl. Micro Computer	3	0	3
ENG 120	Written Expression II	3	0	3
*MAT 117	Elementary Finite Mathematics or	3-4	0	3-4
MAT 145	Finite Mathematics			
		16-17	0	16-17

*Students who have passed Sequential Math III or Intermediate Algebra in high school will take MAT 145 Finite Mathematics.

SECOND YEAR
Fall Semester

BUS 200	Intermediate Accounting I	4	0	4
BUS 205	Cost Accounting I	4	0	4
PHS	Physical Science	3	2-3	4
	Student may choose PHS 113, 114, 115 or 116			
	Social Science Elective	3	0	3
	Elective (pick one elective from group A below)	(2-3)	(0-2)	(3)
		16-17	2-5	18

Spring Semester

BUS 201	Intermediate Accounting II	4	0	4
BUS 206	Cost Accounting II or	4	0	4
BUS 210	Managerial Accounting			
SPK 120	Effective Speaking	3	0	3
	Social Science Elective	3	0	3
	Elective (pick one elective from group B below)	(2-4)	(0-2)	(3-4)
		16-17	3-5	18

Group A Electives: BUS 224, BUS 245, BUS 249, BUS 262, BUS 115* or a programming language (CST)
Group B Electives: BUS 206, BUS 224, BUS 245, BUS 249, BUS 262, BUS 270*, BUS 295 or a programming language (CST).

*BUS 115 is a prerequisite for BUS 270.

ACCOUNTING: BANKING EMPHASIS

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	2	0	2
		15	0	15

*Depending on Mathematics entrance testing scores, the student will take: MAT 090A and QBM or QBM or Free Elective

Spring Semester

BUS 101	Accounting II	4	0	4
BUS 120	Business Law II	3	0	3
*ECO 111	Introduction to Macro-Economics	3	0	3
ENG 120	Written Expression II	3	0	3
PSY 110	Psychology	3	0	3
		16	0	16

SECOND YEAR
Fall Semester

BUS 245	Management: A Behavioral Approach	3	0	3
BUS 211	Business Appl. Micro Computer	3	0	3
SPK 102	Effective Speaking	3	0	3
PHS	Physical Science Students may choose PHS 113, 114, 115 or 116	3	3	4
*ECO 253	Money and Banking	3	0	3
		15	3	16

*ECO 111 is a prerequisite for ECO 253 Money and Banking. If enrollment does not justify offering daytime sections of ECO 253, students must attend evening classes in this subject.

Spring Semester

BUS 249	Personnel Management	3	0	3
BUS 224	Business Finance	3	0	3
BUS 152	Selling Fundamentals	3	0	3
	Mathematics or Science Elective	3-4	0-3	3-4
	#Business Elective	3-4	0	3-4
		15-17	0-3	15-17

#Suggested Business Electives include such American Institute of Banking (BNK) courses as Analyzing Financial Statements, Installment Credit, Principles of Bank Operations, as well as BUS 297 Co-operative Work Experience.

BUSINESS ADMINISTRATION

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	2	0	2
		15	0	15

*Depending on Mathematics entreance testing scores, the student will take: MAT 090A and QBM or QBM or Free Elective

Spring Semester

BUS 101	Accounting II	4	0	4
BUS 120	Business Law II	3	0	3
BUS 115	Business Statistics	3	0	3
ENG 120	Written Expression II	3	0	3
SPK 102	Effective Speaking			
	Select one of the following			
CST 110	Introduction to Data Processing	3	0	3
#CST 115	Introduction to Pascal	2	2	3
	Total	18-19	0-2	19

SECOND YEAR
Fall Semester

ECO 110	Micro Economics	3	0	3
MAT 145	Finite Math	3	0	3
PHS	113-116 Lab Science Elective	3	3	4
	Liberal and General Studies Elective	3	0	3
PED	Physical Education	2	0	1
	#Liberal and General Studies or Business or CST elective	3-4	0-3	3-4
	Total	17-18	0-5	17-18

Spring Semester

ECO 111	Macro Economics	3	0	3
MAT 146	Introduction to Calculus	3	0	3
PHS	113-116 Lab Science Elective	3	3	4
	Liberal and General Studies Elective	3	0	3
	#Liberal and General Studies or Business or CST elective	3-4	0-2	3-4
	Total	15-16	0-5	16-17

Total Credits: 67-70

#To maximize transfer credit, students *must* see their academic advisor for counseling concerning the proper selection of business, liberal and general studies, and computer science electives.

HOTEL TECHNOLOGY: HOTEL/RESTAURANT MANAGEMENT- HOTEL EMPHASIS

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	110	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
BUS	112	Quantitative Business Methods	2	0	2
			15	0	15
Spring Semester					
BUS	249	Personnel Management	3	0	3
TAE	101	Principles of Food Service	3	0	3
TAE	103	Front Office Management	3	0	3
ENG	120	Written Expression II	3	0	3
		Math or Science Elective	(3-4)	(0-3)	(3-4)
			15-16	0-3	15-16

SECOND YEAR
Fall Semester

SPK	102	Effective Speaking	3	0	3
TAE	206	Housekeeping/Property Mgmt.	3	0	3
TAE	208	Hotel/Restaurant Law	3	0	3
TAE	212	Hotel Marketing	3	0	3
PSY	110	General Psychology	3	0	3
			15	0	15
Spring Semester					
TAE	242	Sales Promotions/ Conventions	3	0	3
TAE	256	Banquets and Catering	3	0	3
TAE	265	Food/Beverage/Labor Costs	3	0	3
TAE		Intership or Business Elective	3-4	0	3-4
ECO	110	Intro to Micro Economics	3	0	3
		Math or Science Elective	(3-4)	(0-3)	(3-4)
			18-20	0-3	18-20

HOTEL TECHNOLOGY: HOTEL/RESTAURANT MANAGEMENT- RESTAURANT EMPHASIS

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
BUS	112	Quantitative Business Methods	2	0	2
			15	0	15
Spring Semester					
TAE	101	Principles of Food Service	3	0	3
TAE	103	Front Office Management	3	0	3
TAE	297	Restaurant Internship I	3	0	3
ENG	120	Written Expression II	3	0	3
		Math or Science Elective	(3-4)	(0-3)	(3-4)
			15-16	0-3	15-16

SECOND YEAR
Fall Semester

TAE	206	Housekeeping/Property Management	3	0	3
TAE	207	Hospitality Principles	3	0	3
BUS	249	Personnel Management	3	0	3
SPK	102	Effective Speaking	3	0	3
PSY	110	General Psychology	3	0	3
		Math or Science Elective	(3-4)	(0-3)	(3-4)
			18-19	0-3	18-19
Spring Semester					
TAE	265	Food/Beverage/Labor Costs	3	0	3
TAE	242	Sales Promotions/ Conventions	3	0	3
TAE	256	Banquets and Catering	3	0	3
TAE	298	Restaurant Internship II	3	0	3
ECO	110	Micro Economics	3	0	3
			15	0	15

MARKETING/MANAGEMENT: ENTREPRENEURSHIP EMPHASIS

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BUS 110	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	2	0	2
		15	0	15

*Depending on Mathematics entrance testing scores, the student will take: MAT 090A and QBM or QBM or Free Elective

Spring Semester

BUS 211	Bus. Appl. Micro Computer	3	0	3
BUS 101	Accounting II	4	0	4
BUS 120	Business Law II	3	0	3
ENG 120	Written Expression II	3	0	3
#MAT 117/MAT 139		4	0	4
		17	0	17

SECOND YEAR
Fall Semester

BUS 131	Personal Finance	3	0	3
BUS 224	Business Finance	3	0	3
SPK 102	Effective Speaking	3	0	3
##PHS 111	Physical Science Today	3-4	0-3	3-4
ECO 110	Micro Economics	3	0	3
		15-16	0-3	15-16

Spring Semester

BUS 266	Adv. + Pro. for SB	4	0	4
BUS 263	Small Business Seminar	3	0	3
BUS 245	Management Behavior	3	0	3
	Social Science Elective	3	0	3
	Select one of the following			
###BUS 297	Internship	3	0	3
BUS	Business Elective	3	0	3
		16	0	16

Students will be advised which course to take based on their previous math background.
Students that are planning to transfer are advised to take PHS 113...Physical Science.
###Strongly recommended.

MARKETING/MANAGEMENT: MANAGEMENT EMPHASIS

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	2	0	2
		15	0	15

*Depending on Mathematics entrance testing scores, the student will take: MAT 090A and QBM or QBM or Free Elective

Spring Semester

BUS 101	Accounting II	4	0	4
BUS 120	Business Law II	3	0	3
ENG 120	Written Expression II	3	0	3
PHS	Physical Science	3	3	4
	Students may choose PHS 113, 114, 115 or 116			
MAT 139	Algebra	4	0	4
		17	3	18

SECOND YEAR
Fall Semester

BUS 115	Business Statistics	3	0	3
BUS 224	Business Finance	3	0	3
BUS 245	Management: A Behavioral Approach	3	0	3
BUS 211	Business Applied Micro Computer	3	0	3
SPK 102	Effective Speaking	3	0	3
ECO 110	Micro-Economics	3	0	3
		18	0	18

Spring Semester

BUS 152	Selling Fundamentals	3	0	3
BUS 270	Management Science	3	0	3
BUS 249	Personnel Management	3	0	3
ECO 111	Macro-Econmics	3	0	3
	Elect 1 of the following:			
CST 118	Computer Programming—COBOL	(2)	(2)	(3)
CST 115	Computer Programming—PASCAL	(2)	(2)	(3)
	Business Elective	(3)	(0)	(3)
		14-15	0-2	15

MARKETING/MANAGEMENT: MARKETING EMPHASIS

FIRST YEAR
Fall Semester

			Hours per Week		Credits per Semester
			Class	Lab	
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	2	0	2
			15	0	15

*Depending on Mathematics entrance testing scores, the student will take: MAT 090A and QBM or QBM or Free Elective

Spring Semester

BUS	120	Business Law II	3	0	3
BUS	249	Personnel Management	3	0	3
ENG	110	Written Expression II	3	0	3
PSY	110	Psychology	3	0	3
SPK	102	Effective Speaking	3	0	3
			15	0	15

SECOND YEAR
Fall Semester

BUS	229	Advertising	4	0	4
BUS	211	Business Appl. Micro Computer	3	0	3
BUS	152	Selling Fundamentals	3	0	3
PHS	111	Physical Science for Today	2	2	3
BUS		Business Elective	(3-4)	0	(3-4)
ECO	110	Micro Economics or	3	0	3
SOC	110	Introduction to Sociology			
			18-19	2	19-20

Spring Semester

BUS	129	Consumer Behavior	3	0	3
BUS	259	Business Report Writing	3	0	3
BUS	242	Marketing Seminar	3	0	3
BUS	245	Management: A Behavioral Approach	3	0	3
BUS	264	Retailing	3	0	3
		Mathematics or Science Elective	(3-4)	(0-3)	(3-4)
			18-19	(0-3)	18-19



MARKETING/MANAGEMENT: RETAIL MANAGEMENT EMPHASIS

FIRST YEAR
Fall Semester

			Hours per Week		Credits per Semester
			Class	Lab	
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	2	0	2
			15	0	15

*Depending on Mathematics entrance testing scores, the student will take: MAT 090A and QBM or QBM or Free Elective

Spring Semester

BUS	264	Retailing	3	0	3
BUS	120	Business Law II	3	0	3
BUS	129	Consumer Behavior	3	0	3
ENG	120	Written Expression II	3	0	3
SOC		Social Science Elective	3	0	3
SPK	102	Effective Speaking	3	0	3
			18	0	18

SECOND YEAR
Fall Semester

BUS	211	Business Appl Micro Computer	3	0	3
BUS	265	Retail Merchandising	3	0	3
BUS	152	Selling Fundamentals	3	0	3
BUS	259	Report Writing	3	0	3
	**	Math or Science Elective	3-4	0-3	3-4
			15-16	0-3	16-17

Spring Semester

BUS	130	Retail Management	3	0	3
BUS		Business Elective	3-4	0	3-4
BUS	245	Management: Behav. Approach	3	0	3
ECO	110	Micro Economics	3	0	3
*PHS		Physical Science	(3-4)	(2-3)	(3-4)
			15-17	2-3	15-17

*Students that are planning to transfer will be advised to take PHS 113...116 Physical Science

**Recommended that the student consider MAT 117, 124, or 145 when selecting a Math course.

OFFICE TECHNOLOGIES

DEPARTMENT CHAIRPERSON, Patricia Franks
Business Building, Room 108
Telephone 771-5137

ACADEMIC ADVISING, Evelyn Katusak
Business Building, Room 104
Telephone 771-5174

Broome Community College offers three degree options of study in Office Technologies - Executive Secretary, Office Services Assistant, and Word Processing. The department also offers a one-year certificate in General Office. Graduates of the options usually obtain immediate employment as stenographers, secretaries, office assistants, or word processors.

Executive Secretarial students study terminology in such fields as law, education, insurance, real estate, and investments as well as technical terminology so that they can understand the specialized language used in the professions, government, and business firms as well as the specialized language used in engineering and such new fields as the emerging automated office.

Office Services Assistant students study a variety of courses including accounting, typewriting and office management. The graduates of the office Services Assistant option, with its emphasis on machine transcription, text editing concepts, and equipment, should find employment in word processing centers and other areas of office service work.

Word Processing option students concentrate their study in such areas as word processing concepts, text editing functions and applications, data processing, data entry, and the administration of automated offices. These graduates are prepared to handle the basic operations and administrative duties of the integrated automated office.

The faculty of this department places the responsibility of class attendance upon the student, who should attend classes regularly and on time. If an employee does not show up for work, he/she can expect to be terminated. A student who does not attend classes can expect to fail. Faculty will inform students of the College's and department's attendance and academic dismissal policies. It is the student's responsibility to understand these policies. Whenever a faculty member feels that a student has been absent or tardy to the extent that it may be detrimental to the student's academic standing, the faculty member will inform the department chairperson, who will in turn meet with the student concerned for appropriate action.

Non-traditional students and part-time students should meet with the academic advisement coordinator in Room 103 of the Business Building (phone 771-5174) for academic advisement prior to registering for classes. These students must refer to course descriptions to be certain they meet prerequisite requirements prior to registering for courses. If a student fails DOT 101A Typewriting or DOT 109 Basic Transcription twice, he/she will be dismissed from the program. If the student fails DOT 110 Shorthand twice, he/she will be dismissed from the Executive Secretarial option. The student will be given an opportunity to choose another option.



EXECUTIVE SECRETARY

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
*DOT 101	A, B, C, Typewriting (5-week courses) OR	2	3	3
*DOT 102	A, B, C, Typewriting (5-week courses)			
DOT 109	Basic Transcription	3	0	3
*DOT 110	Shorthand OR	2	3	3
*DOT 111	Shortland & Transcription			
#DOT 103	Freshman Orientation	½	0	½
ENG 110	Written Expression I	3	0	3
+BUS 112	Quantitative Business Methods	2	0	2
CST 110	Introduction to Data Processing	3	0	3
		15½	6	17½

*Student's background will determine placement.
#DOT 130 Freshman Orientation meets every other week for one hour.
+MAT 090A placement prerequisite

Spring Semester

DOT 102	A, B, C, Typewriting (see above) OR	2	3	3
	Business Elective	3	0	3
DOT 111	Shorthand & Transcription (see above) OR	2	3	3
	Business Elective	3	0	3
DOT 151	Business Communication	3	0	3
#DOT 237	Text Editing I	1	4	1
#DOT 238	Text Editing II	1	4	1
#DOT 239	Text Editing III	1	4	1
ENG 120	Written Expression II	3	0	3
		11-13	4-10	15

#Each course is a 5-week course.

SECOND YEAR
Fall Semester

DOT 230	Advanced Shorthand	2	3	3
#DOT 235	Executive Transcription	1	4	1
#DOT 243	Records Management	3	0	1
BUS 100	Accounting I	4	0	4
ECO 110	Introduction to Micro-Economics OR	3	0	3
ECO 111	Introduction to Macro-Economics			
	Lab Science Elective	2-3	2-3	3-4
	Liberal and General Studies Elective	3	0	3
		17-18	7-8	18-19

#Each course is a 5-week course.

Spring Semester

DOT 211	Advanced Typewriting	2	2	3
DOT 242	Office Procedures	3	0	3
DOT 260	Model Office OR	0	4	2
DOT 270	Internship			
BUS 118	Business Law	3	0	3
	*Mathematics or Science Elective	2-3	0-3	3-4
	Social Science Elective	3	0	3
		13-14	6-9	17-18

*MAT 113 or higher

OFFICE SERVICES ASSISTANT

FIRST YEAR
Fall Semester

	Hours per Week		Credits per
	Class	Lab	Semester
*DOT 101 A, B, C, Typewriting (5-week courses) OR	2	3	3
*DOT 102 A, B, C, Typewriting (5-week courses)			
DOT 109 Basic Transcription	3	0	3
#DOT 130 Freshman Orientation	½	0	½
ENG 110 Written Expression I	3	0	3
+BUS 112 Quantitative Business Methods	2	0	2
BUS 118 Business Law	3	0	3
CST 110 Introduction to Data Processing	3	0	3
	16½	3	17½

*Student's typing background will determine placement in DOT 101 or DOT 102
#DOT 130 Freshman Orientation meets every other week for one hour.
+MAT 090A Placement prerequisite

Spring Semester

DOT 102 A, B, C, Typewriting (See above)	2	3	3
OR			
Business Elective	3	0	3
DOT 151 Business Communications	3	0	3
#DOT 237 Text Editing I	1	4	1
#DOT 238 Text Editing II	1	4	1
#DOT 239 Text Editing III	1	4	1
ENG 120 Written Expression II	3	0	3
Liberal and General Studies Elective	3	0	3
	14-15	4-7	15

#Each course is a 5-week course.

SECOND YEAR
Fall Semester

DOT 211 Advanced Typing	2	2	3
DOT 236 Machine Transcription	3	2	4
BUS 100 Accounting I	4	0	4
ECO 110 Introduction to Micro-Economics	3	0	3
Lab Science Elective	2-3	2-3	3
	14-15	6-7	17

Spring Semester

DOT 242 Office Procedures	3	0	3
#DOT 243 Records Management	3	0	1
DOT 260 Model Office OR	0	4	2
DOT 270 Internship			
BUS 101 Accounting II	4	0	4
ECO 111 Introduction to Macro-Economics	3	0	3
*Math or Science Elective	2-3	0-3	3-4
	13-14	4-7	16-17

#Each course is a 5-week course.
*MAT 113 or higher

WORD PROCESSING

FIRST YEAR
Fall Semester

	Hours per Week		Credits per
	Class	Lab	Semester
*DOT 101 A, B, C, Typewriting (5-week courses) or	2	3	3
*DOT 102 A, B, C, Typewriting (5-week courses)			
DOT 109 Basic Transcription	3	0	3
#DOT 130 Freshman Orientation	½	0	½
ENG 110 Written Expression I	3	0	3
+BUS 112 Quantitative Business Methods	2	0	2
Lab Science Elective	2-3	2-3	3-4
CST 110 Introduction to Data Processing	3	0	3
	15½-16½	5-6	17½-18½

*Student's typing background will determine placement in DOT 101 or DOT 102.
#DOT 130 Freshman Orientation meets every other week for one hour.
+MAT 090A Placement prerequisite.

Spring Semester

DOT 102 A, B, C, Typewriting (see above)	2	3	3
or			
Business Elective	3	0	3
DOT 151 Business Communications	3	0	3
#DOT 237 Text Editing I	1	4	1
#DOT 238 Text Editing II	1	4	1
#DOT 239 Text Editing III	1	4	1
ENG 120 Written Expression II	3	0	3
Liberal and General Studies Elective	3	0	3
	12-13	407	15

#Each is a 5-week course.

SECOND YEAR
Fall Semester

DOT 236 Machine Transcription	3	2	4
DOT 241 Word Processing Concepts	3	0	3
BUS 100 Accounting I	4	0	4
*MAT 117, 124, or 145	3-4	0	3-4
Social Science Elective	3	0	3
	16-17	6-8	17-18

*MAT 090B Prerequisite

Spring Semester

#DOT 243 Record Management	3	0	1
DOT 250 Office Administration	3	0	3
DOT 260 Model Office or	0	4	2
DOT 270 Internship			
BUS 101 Accounting II	4	0	4
or			
BUS Elective	3	0	3
BUS 211 Business Applications on the Microcomp	3	0	3
Social Science Elective	3	0	3
	13-14	4	15-16

#Each is a 5-week course.

OFFICE TECHNOLOGIES CERTIFICATE

INTRODUCTORY COURSES

		Hours per Week		Credits per
		Class	Lab	Semester
*DOT 101	A, B, C, Typewriting (5-week courses) or	2	3	3
*DOT 102	A, B, C, Typewriting (5-week courses)			
DOT 109	Basic Transcription	3	0	3
+DOT 130	Freshman Orientation	½	0	½
#DOT 243	Records Management	3	0	1
ENG 110	Written Expression I	3	0	3
PSY 110	General Psychology OR	3	0	3
	Liberal and General Studies Elective			
CST 110	Introduction to Data Processing	3	0	3
		15½	3	16½

*Student's background will determine placement.
+DOT 130 Freshman Orientation meets every other week for one hour.
#Each course is a 5-week course.

ADDITIONAL COURSES

DOT 102	A, B, C, Typewriting (see above) or	2	3	3
	Business Elective	3	0	3
DOT 151	Business Communications	3	0	3
#DOT 237	Text Editing I	1	4	1
#DOT 238	Text Editing II	1	4	1
#DOT 239	Text Editing III	1	4	1
BUS 112	Quantitative Business Methods or	2	0	2
MAT 110	Consumer Mathematics	3	0	3
BUS 118	Business Law I or	3	0	3
	Business Elective Liberal and General Studies Elective	3	0	3
		14-16	4-7	17-18

#Each course is a 5-week course.

REAL ESTATE

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	2	0	2
		15	0	15

*Depending on Mathematics entrance testing scores, the student will take: MAT 090A and QBM or QBM or Free Elective

Spring Semester

*BUS 163	Real Estate Salespersons	4	0	4
BUS 211	Micro Computers	3	0	3
ENG 120	Written Expression II	3	0	3
PSY	Psychology	3	0	3
		16	0	16

SECOND YEAR
Fall Semester

*BUS 164	Real Estate Brokers	4	0	4
BUS 259	Report Writing	3	0	3
SPK 102	Effective Speaking	3	0	3
PHS 111	Physical Science	2	2	3
	one of the following			
ECO 110	Micro Economics or	(3)	(0)	(3)
SOC 110	Introduction to Sociology	(3)	(0)	(3)
		15	2	16

Spring Semester

BUS 229	Advertising	4	0	4
BUS 152	Selling Fundamentals	3	0	3
BUS 262	Small Business Management	3	0	3
	Math/Science Elective	3-4	0-3	3-4
	Select one of the following			
*BUS 176	Real Estate Finance	(3)	(0)	(3)
*BUS 161	Real Estate Appraisals	(3)	(0)	(3)
		16-17	0-3	16-17

*Offered evenings only.

TRAVEL AND TOURISM

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BUS 100	Accounting	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	2	0	2
		15	0	15

*Depending on Mathematics entrance testing scores, the student will take: MAT 090A and QBM or QBM or Free Elective

Spring Semester

TAE 100	Introduction to Travel and Tourism	3	0	3
SEC 108	Keyboarding	3	0	3
BUS 120	Business Law II	3	0	3
ENG 120	Written Expression II	3	0	3
GEO 120	World Geography	3	0	3
SPK 102	Effective Speaking	3	0	3
		18	0	16

SECOND YEAR
Fall Semester

TAE 116	Travel and Tourism I	3	0	3
BUS 152	Selling Fundamentals	3	0	3
PHS 113...116	Physical Science	3	3	4
BUS 259	Reporting Writing	3	0	3
BUS 211	Business Application Micro Computer	(3)	(0)	(3)
		15	3	16

Spring Semester

TAE 216	Travel and Tourism II	3	0	3
TAE 290	Travel and Tourism Practicum	3	0	3
BUS 262	Small Business Management	3	0	3
MAT 139	Algebra	4	0	4
	Social Science Elective	3	0	3
	Select one of the following:			
BUS	Business Elective	(3)	(0)	(3)
BUS 297	Internship	(3)	(0)	(3)
		19	0	19



HEALTH SCIENCES

Opportunities for men and women interested in the health sciences field are provided in six areas - Dental Hygiene, Medical Assistant, Medical Laboratory Technology, Medical Record Technology, Nursing and Radiologic Technology. Graduates are prepared to work immediately after graduation in physician's or dentist's offices, laboratories or hospitals. Graduates of these programs are also qualified to take whatever licensing examination their professions require. The College also offers a Dietary Manager Certificate program for those working in the field.



DENTAL HYGIENE

DEPARTMENT CHAIRPERSON, Dorothy J. Walsh
Science Building, Room 108
Telephone 771-5149

The Dental Hygiene curriculum is designed to prepare students for the contemporary practice of dental hygiene. The curriculum emphasizes the fundamental knowledge necessary for practice in a private dental office or similar clinical setting under the supervision of a dentist.

The dental hygienist performs various services, such as dental prophylaxis, topical flouride applications, pit and fissure sealants, dental radiographs and instruction in plaque control procedures. Successful completion of the curriculum permits one to take the required written and practical licensure examinations.

Dental Hygiene graduates averaged $17,551 as starting salaries in 1986, encompassing a range from $15,300 - 20,800.

Students must purchase instruments and clinic attire which ranges from $400-$450 and pay license examination fees which range from $300-$350, in addition to textbooks and supplies. They are also expected to purchase protective eye glasses, disposable treatment gloves, masks and malpractice insurance for clinical practice. Students are also required to complete the Dental Hygiene Departmental Health Questionnaire prior to admittance to DEN 101 Dental Hygiene I.

Students who wish to pursue a career as a dental hygienist in public health, health management, health education or dental hygiene education are encouraged to transfer to a baccalaureate program after graduation.

The program is accredited by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Post-Secondary Accreditation and by the United State Department of Education.

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BIO	131	Human Biology I	3	2	4
DEN	101	Dental Hygiene I	2	6	4
DEN	103	Oral Anatomy and Physiology	2	4	4
ENG	110	Written Expression I	3	0	3
			10	12	15

Spring Semester

BIO	132	Human Biology II	3	2	4
DEN	102	Dental Hygiene II	4	8	6
DEN	106	Clinical Dental Radiography	1	2	2
DEN	110	Dental Materials	2	2	3
BIO	160	Microbiology	2	3	3
			12	17	18

SECOND YEAR
Fall Semester

DEN	201	Dental Hygiene III	2	12	5
DEN	204	General and Oral Pathology	3	0	3
DEN	205	Periodontology	2	0	2
DEN	209	Nutrition	3	0	3
DEN	213	Public Health	2	2	3
SPK	102	Effective Speaking	3	0	3
			15	14	19

Spring Semester

DEN	202	Dental Hygiene IV	2	12	5
DEN	206	Dental Pharmacology	2	0	2
DEN	214	Dental Specialties	2	0	2
SOC	110	Introduction to Sociology	3	0	3
PSY	110	General Psychology	3	0	3
			12	12	15

NOTE: Students must have completed a course in CPR (Cardio-Pulmonary Resuscitation) prior to admittance to DH I in the Fall semester and must be re-certified prior to DH III. The department strongly recommends that the student have a vaccination against Hepatitis B prior to treating patients in DH II.

GRADUATION REQUIREMENTS: 67 CREDITS

MEDICAL ASSISTANT

DEPARTMENT CHAIRPERSON, Teressa H. Buran
Mechanical Building, Room 220
Telephone 771-5261

A Medical Assistant is one of the most versatile of all the allied health professionals. There is a variety of employment opportunities available for individuals with associate degrees. These positions are in physician's offices, medical centers, clinics, hospitals, armed services, laboratories and pharmaceutical companies. One can also find employment in public, industrial, school, and correctional health departments, as well as in the fields of research, publishing and teaching. A medical assistant can seek additional degrees in such fields as allied health services, health care management, and education. The program is designed to enable graduates to do both administrative assisting and clinical/laboratory assisting.

By studying specifically related subjects as medical assisting procedures, clinical laboratory procedures and human biology, students will acquire the knowledge and techniques to prepare patients for examinations and assist the physician. These courses also prepare them to perform not only routine medical procedures but also electrocardiography, audiometry, urinalysis and hematological tests.

Courses in medical terminology, typing, medical correspondence and medical office management prepare the student to conduct business and administrative duties. English, social sciences, psychology and medical law are included to provide a general background.

Directed Practice is an integral part of the curriculum as senior students participate in a 15 week externship program that requires a working experience in physician's offices or other health care facilities.

The curriculum is accredited by the Committee on Allied Health Education and Accreditation in collaboration with the American Medical Association (AMA) and the American Association of Medical Assistants (AAMA). Graduates are awarded the Associate in Applied Science degree and may elect to take a national examination given by the AAMA to become Certified Medical Assistants. This CMA status is known throughout the country, recognizing the graduate as a competent professional and leads to improved career opportunities and higher salaries.

Starting salaries of graduates of the program in 1986 averaged over $10,587. The work week is usually less than 40 hours with fringe benefits such as medical care, medications and paid health insurance.

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BIO 131	Human Biology I	3	2	4
ENG 110	Written Expression I	3	0	3
MDA 102	Medical Assisting Science	2	0	2
MDA 104	Keyboarding and Medical Word Processing	2	3	3
MDA 114	Standard First Aid and Personal Safety; Management of Emergencies	0	2	1
MRT 105	Medical Terminology I	2	0	2
†HSV 101	Cardio-Pulmonary Resuscitation	0	1	½
		12	8	15½

†This course will be given in clusters of 2 hours each of a total of 8 instructional hours.

Spring Semester

BIO 132	Human Biology II	3	2	4
MDA 115	Medical Assisting Procedures I	3	2	4
MDA 106	Medical Correspondence and Communications	0	4	2
MRT 115	Medical Terminology II	2	0	2
SPK 102	Effective Speaking or	3	0	3
ENG 120	Written Expression II			
		11	8	15

SECOND YEAR
Fall Semester

CST 105	Understanding Computers	2	2	3
MDA 206	Medical Office Management	3	3	4
MDA 208	Medical Ethics, Law and Economics	3	0	3
#MDA 211	Medical Assisting Procedures II	2	4	4
PSY 110	Psychology	3	0	3
		13	9	17

Spring Semester

MDA 201	Medical Assisting Procedures III	2	4	4
MDA 245	Directed Practice & Seminar	1	16	5
MDA 210	Pharmacology	2	0	2
SOC 110	Introduction to Socicology	3	0	3
		8	20	14

#It is strongly recommended that this course be taken the semester before MDA 245 Directed Practice.

GRADUATION REQUIREMENTS: 61.5 CREDITS

MEDICAL LABORATORY TECHNOLOGY

DEPARTMENT CHAIRPERSON, Julia Peacock
Titchener Hall, Room 221
Telephone 771-5065

Medical Technology is a health profession which combines the best of several worlds. In this field, the basic sciences of Biology and Chemistry are merged with Medicine. Medical Technologists and Medical Laboratory Technicians perform biological tests in search of diagnostic clues as evidence of health or disease.

In the search for data on a patient's health, people working in this field may examine specimens through a microscope or perform, for example, the tests necessary to match a donated unit of blood to a patient in need of that unit. Or, they may identify the microorganisms associated with health and disease. They are also competent operators of the computers and complex electronic instrumentation which are used in most areas of today's laboratories.

Although they usually spend less time with patients than physicians and other health professionals, the Medical Technologist and Technician play a vital role in patient care. In many laboratories, the Medical Technologist and Technician performs the full range of laboratory testing in all five major areas of the laboratory, which are Hermatology, Immunology, Microbiology, Blood Banking, and Chemistry. In other laboratories, the technologists or technician can choose to "specialize" or concentrate study and work in only one of the areas listed.

While entry to the field may be accomplished at the Medical Laboratory Technicians (AAS Degree) level, a technician may choose to continue to advance, by education or experience, to the BS level, as a Medical Technologist, or as a specialist in any of the five areas they choose. Because of this diversity, many technicians find advancement in their profession well within their grasp.

Students are required to complete health information forms and must carry health insurance during their clinical training in our hospital affiliates.

Approximately two-thirds of practicing technologists work in hospital laboratories. Others are employed in physicians offices, clinics, commercial firms such as pharmaceutical companies, all types of research facilities, the armed forces, public health centers and in veterinary clinics. Many are teachers or serve in managerial positions. Still others are representatives for commercial suppliers or work in product development for those companies.

Wherever they work, the technicians and technologists is this field share a strong desire to help others, a love of challenge and responsibility, and the ability to complete a wide variety of scientific tests accurately and reliably.

This program is accredited by the Committee on Allied Health Education and Accreditation (CAHEA), as recommended by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Pre-admission advertisement is recommended.

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BIO 131	Human Biology I	3	2	4
CHM 145	Chemistry	3	3	4
ENG 110	Written Expression I	3	0	3
MAT 125	Statistice I Using Computer	3	1	3
MLT 110	Introduction to Medical Laboratory Technology	1	0	1
	Social Science Elective	3	0	3
		16	6	18

Spring Semester

BIO 132	Human Biology II	3	2	4
CHM 146	Chemistry	3	3	4
CHM 133	Survey or Organic Chemistry	3	4	4
	Social Science Elective	3	0	3
ENG 120	Written Expression II or			
SPK 102	Effective Speaking	3	0	3
		15	9	18

SECOND YEAR
Fall/Spring Semester

		Hours per Day		Prac.	No. of	Credits per
		Class	Lab	Total	Weeks	Semester
MLT 201	Hematology/ Coagulation	2	4	0	3	3
MLT 201P	Hematology/ Coagulation Practicum	0	0	30	3	3
MLT 202	Urinalysis/Body Fluids	2	4	0	1	1
MLT 202P	Urinalysis/Body Fluids Practicum	0	0	40	1	1
MLT 203	Microbiology	3	3	0	5	6
MLT 203P	Microbiology Practicum	0	0	40	2	2
MLT 204	Phlebotomy	0	0	38	*	1
						17

*Students will be gaining experience in Phlebotomy over a 3-week period.

NOTE-All classes, laboratories and practicum sessions (Prac) in the courses listed above and below meet every school day for the number of weeks indicated. Practicum sessions will be in area participating hospitals. One group of students will take the courses listed immediately above in the fall and those below in the spring. The other group will take the above courses in the spring and those listed below in the fall.

Fall/Spring Semester

		Hours per Day		Prac.	No. of	Credits per
		Class	Lab	Total	Weeks	Semester
MLT 205	Immunology	2	4	0	3	4
MLT 206	Immunohematology	2	4	0	2	2
MLT 206P	Immunohematology Practicum	0	0	35	2	2
MLT 207	Clinical Chemistry	2	4	0	5	5
MLT 207P	Clinical Chemistry Practicum	0	0	35	3	3
CHM 220	Introduction to Instrumental Analysis	†				2
						18

†Students taking Instrumental Analysis will meet for 15 class hours and 45 laboratory hours over the 15-week semester.

GRADUATION REQUIREMENTS: 71 CREDITS

MEDICAL RECORD TECHNOLOGY

DEPARTMENT CHAIRPERSON, Mary Rosato
Business Building, Room 031
Telephone 771-5051

A medical record is the permanent report of a person's illness or injury kept to preserve information of medical, scientific and legal value. The record includes all medical reports which describe how the patient's illness was diagnosed and treated. Medical records are needed to help doctors diagnose and treat future illness, to verify insurance claims, to plan hospitals, to inform the public health officials, and to aid researchers.

The medical record technician works in the medical record department of a hospital, clinic, nursing home, school of veterinary medicine or other health facility and is responsible for many aspects of preparing, analyzing and preserving health information needed by the patients, by the hospital and by the public. The duties include reviewing medical records for completeness and accuracy and also translating diseases and operations into the proper coding symbols.

Other duties include filing medical records, preparing records for microfilm, typing reports of operations, X-rays and laboratory examinations, as well as histories, physical examinations and discharge summaries, compiling statistics of many kinds, assisting the medical staff by preparing special studies and tabulating data from records for research. Supervising the day-to-day operation of a medical record department, taking records to court and maintaining the flow of the total work picture.

Practice in the college medical record laboratory as well as in medical records departments of cooperating hospitals and other health care facilities, either within or outside the area, provides opportunities for additional educational experience which is the vital core of the program.

This curriculum is accredited by the Committee on Allied Health Education and Accreditation of the American Medical Record Association. Students in this program are eligible to take the Medical Record Accredition Examination following graduation and upon completion receive the title of Accredited Record Technician (ART). Salaries for 1986 graduates ranged from $10,000 to $15,500 with an average of $13,372. Graduates can continue medical record education toward a baccalaureate degree at four-year colleges.

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BIO	131	Human Biology I	3	2	4
ENG	110	Written Expression I	3	0	3
MRT	101	Medical Record Science I	2	0	2
MRT	101L	Medical Record Science I Lab	0	2	1
MRT	105	Medical Terminology I	2	0	2
CST	105	Understanding Computers	2	2	3
†HSV	101	Cardio-Pulmonary Resuscitation	0	1	½
			12	7	15½

†This course will be given in clusters of 2 hours each for a total of 8 instructional hours.

Spring Semester

BIO	132	Human Biology II	3	2	4
MRT	107	Medical Transcription	0	4	2
MRT	110	Medical Record Science II	2	0	2
MRT	110L	Medical Record Science II Lab	0	2	1
MRT	115	Medical Terminology II	2	0	2
SPK	102	Effective Speaking	3	0	3
SOC		Social Science Elective	3	0	3
			13	8	17

Summer Term
*MRT 144 Directed Practice ...40 Hours per week for 4 weeks—4 Credits

SECOND YEAR
Fall Semester

BIO	140	Pathophysiology	3	0	3
MRT	202	Medical Record Science III	2	0	2
MRT	202L	Medical Record Science III Lab	0	4	2
MRT	208	Advanced Medical Transcription	1	2	2
MRT	222	Medical Legal Aspects	3	0	3
SOC		Social Science Elective	3	0	3
			12	6	15

Spring Semester

MRT	210	Medical Record Science IV	2	0	2
MRT	210L	Medical Record Science IV Lab	0	2	1
*MRT	245	Directed Practice	0	16	4
MRT	295	Medical Record Seminar	2	0	2
MRT	236	Quality Assurance	2	2	2
MRT	216	Clinical Practicum	0	2	1
			5	22	12

*GRADUATION REQUIREMENT

GRADUATION REQUIREMENTS: 63.5 CREDITS

NURSING

DEPARTMENT CHAIRPERSON, Janet H. Wright
901 Front Street
Telephone 771-5060

Broome Community College offers a two-year, college-based curriculum to prepare graduates for immediate entrance into the first level of registered nursing. Graduates of this curriculum are eligible to take the licensing examination for registered nurses. They are qualified for immediate employment in bedside nursing care, or they may wish to continue their education for the baccalaureate and higher degrees in the nursing field. The 1986 graduates of this program averaged $17,413 in their starting salaries, which ranged from $12,000 to $26,000.

The curriculum operates as a college program, with classes and laboratories held on the campus. Clinical instruction is in the cooperating hospitals and nursing homes of the Triple Cities. The clinical experiences, which are an integral part of the Nursing curriculum, include caring for individuals in all age groups, as well as observation periods in community health and social agencies. Grading in the extended campus laboratory is on a satisfactory/unsatisfactory basis.

Enrollment in the Nursing curriculum requires that each student have a completed health form submitted to the Department Chairperson prior to the first clinical assignment.

Mature men and women are encouraged to enter this program along with recent high school graduates, whether they are married or single.

This program is accredited by the National League for Nursing.

NOTE—Each student enrolled in Nursing is expected to meet the Mathematics proficiency requirement. Also, a health examination and a medical insurance policy are required.



FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
ADN	100	Meeting Basic Human Needs[1]	4	0	4
ADN	100C	Extended Campus Lab[1,2]	0	6	2
BIO	131	Human Biology I	3	2	4
PSY	110	General Psychology	3	0	3
ENG	110	Written Expression I	3	0	3
HSV	101	Cardio-Pulmonary Resuscitation	0	1	.5
			13	5	16.5

Spring Semester

ADN	102	Meeting Mobility Needs[1]	3	0	3
ADN	102C	Extended Campus Lab[1,2]	0	6	2
ADN	103	Nursing Issues I	2	0	1
ADN	298	Nursing Seminar III[6]	0	0	0
BIO	132	Human Biology II	3	2	4
PSY		Growth and Development	3	0	3
		Social Science Elective	3	0	3
			14	8	16

SECOND YEAR
Fall Semester

ADN	204	Regulatory Concepts[1]	3	0	3
ADN	204C	Extended Campus Lab[1,2]	0	4.5	1.5
ADN	205	Psychological Concepts I[1]	3	0	3
ADN	205C	Extended Campus Lab[1,2]	0	3	1
ADN	210	Family Centered Maternity Nursing[1]	3	0	3
ADN	210C	Extended Campus Lab[1,2]	0	4.5	1.5
ADN	298	Nursing Seminar III[6]	0	0	0
ENG/HUM		English II	3	0	3
			12	12	16

Spring Semester

ADN	206	Concepts of Obstruction & Inflammation[1]	3	0	3
ADN	206C	Extended Campus Lab[1,2]	0	4.5	1.5
ADN	207	Oxygenation Concepts[1]	3	0	3
ADN	207C	Extended Campus Lab[1,2]	0	4.5	1.5
ADN	208	Psychological Concepts II[1]	3	0	3
ADN	208C	Extended Campus Lab[1,2]	0	3	1
ADN	297	Nursing Issues II	2	0	1
ADN	298	Nursing Seminar III[6]	0	0	0
		Free Elective	3	0	3
			14	12	17

Notes:

1. In order to progress, students must pass clinical course as concurrent course with lecture component.
2. S/U grade for these courses.
3. In order to progress, students must complete assignments in nursing skills center.
4. Each student enrolled in Nursing is expected to meet the mathematics proficiency requirement.
5. Clinical experiences for Nursing students may be scheduled during evening hours on their regular extended campus lab days.
6. ADN 298, Nursing Seminar III, is required of all returning, transfer and challenge students.
7. The Nursing program must be completed in 4 academic years.

GRADUATION REQUIREMENTS: 65.5 CREDITS

RADIOLOGIC TECHNOLOGY

DEPARTMENT CHAIRPERSON, Nancy Button
Business Building, Room 023
Telephone 771-5070

Because 2200 hours of clinical practice are required in this curriculum, freshmen courses identified with the RAD designator will begin the week of registration, which is one week before the start of regular classes.

Radiologic Technology is a diverse profession. The radiographer must draw from the fields of communication, psychology, photography and the physical and biological sciences, while utilizing an investigative approach to perform the daily tasks. Radiographers are in demand in nearly every community - in hospitals, physicians' offices, clinics, government, education, industry and research.

The typical role of the radiographer consists of producing radiographs used in the diagnosis of disease and injury. In producing radiographs, the radiographer operates x-ray equipment, provides patient care, provides radiation protection, positions the patient for the examination, selects technical factors for radiographic quality, produces and processes radiographs, maintains quality control and also maintains patient records. Other duties include use of mobile X-ray equipment in the operating room, emergency room and at the patient's bedside.

A radiographer may continue education in areas such as ultrasound, nuclear medicine, special radiographic procedures, Computed Tomography (CT), Magnetic Resonance Imaging (MRI), departmental administration, research, education and radiation therapy.

The radiologic Technology program at Broome Community College consists of two years of combined academic and clinical education, the equivalent of 24 calendar months. Clinical education is provided in one of our cooperating hospitals. Based on a 40 hour/week schedule, students spend approximately one-third of their time in professional and general education courses at the college. The remaining two-third is spent in the college laboratory or in the hospital, obtaining a complete range of supervised clinical experiences including new imaging modalities.

The clinical experience is a viable part of the educational process. Upon completion of 2200 hours of clinical practice as well as the academic requirements of the program, the graduate is eligible to sit for the examination of the American Registry of Radiologic Technologists for certification and New York State licensure.

The curriculum is accredited by the Committee on Allied Health Education and Accreditation of the American Medical Association.

Starting Salaries for the 1986 graduates ranged between $14,144 and $18,304, with an average of $16,322.



FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BIO 131	Human Biology	3	2	4
ENG 110	Written Expression I	3	0	3
RAD 100	Introduction to Radiologic Technology	2	3	3
RAD 101	Radiologic Technology I	3	1	3
RAD 103	Positioning I	0	3	1
RAD 105	Medical Terminology	1	0	1
RAD 115	Radiation Protection	1	0	1
†HSV 101	Cardi-Pulmonary Resuscitation	0	1	½
		14	11	17½

†This course will average out to one hour per week over the semester, but will probably be given in clusters of 3 hours each in the evening or of 7½ hours each on Saturday to make a total or 15 hours.

WINTER TERM I

*RAD 131	Clinical Education I	(40 hours per week)		

Spring Semester

BIO 132	Human Biology II	3	2	4
ENG 120	Written Expression II	3	0	3
PHY 117	Physics	2	2	3
RAD 102	Radiologic Technology II	3	1	3
RAD 104	Positioning II	0	3	1
RAD 132	Clinical Education II	0	16	2
		11	24	16

SUMMER TERM I

*RAD 133	Clinical Education III	0	40	3

SECOND YEAR
Fall Semester

PSY 110	General Psychology	3	0	3
RAD 203	Positioning III	0	3	1
RAD 210	Radiologic Physics	4	0	4
RAD 230	Clinical Education IV	0	16	2
	Social Science Elective	3	0	3
CST 105	Understanding Computers	2	2	3
		12	21	16

WINTER TERM II

*RAD 231	Clinical Education V	(40 hours per week)		
RAD 216	Imaging Modalities	1	0	1

Spring Semester

RAD 225	Special Radiographic Procedures	3	2	4
RAD 220	Radiologic Pathology	2	0	2
RAD 232	Clinical Education VI	0	16	2
RAD 245	Radiobiology	2	0	2
RAD 250	Image Assessment	2	1	2
RAD 295	Seminar in Radiography	2	0	2
		12	19	15

SUMMER TERM II

*RAD 233	Clinical Education VII	0	40	3

***Successful achievement is a GRADUATION REQUIREMENT**
*Not offered 1988

GRADUATION REQUIREMENTS: 71.5 CREDITS

DIVISION OF LIBERAL AND GENERAL STUDIES

DIVISION DEAN, George Higginbottom
Titchener Hall, Room 121
Telephone 771-5031

The Division of Liberal and General Studies has a dual function. First, it manages a variety of degree programs ranging from traditional Arts and Sciences concentrations, to Mental Health, to Special Careers and Individual Studies. It also coordinates the crediting of experiential learning. Second, it provides campus leadership in setting the standards for "general" education in all curricula: courses and learning objectives in humanities, social sciences, math, and science. Following some general information pertaining to academic advisement, each of the programs of the division is profiled.

ACADEMIC ADVISEMENT

FULL-TIME STUDENTS

Every full-time student is assigned a faculty advisor. Students are encouraged to meet regularly with their advisors. All students are required to complete in the presence of their advisors a Degree Advisement Contract prior to each semester's registration. Its purpose is to monitor the student's progress toward the degree.

The divisional office staff is available to deal with special problems relating to academic requirements and transfer. While the faculty and staff will make every reasonable effort to help students with academic planning, students must also assume responsibility for their programs and particularly, in familiarizing themselves with degree requirements.

PART-TIME STUDENTS

Part-time day students who intend to matriculate in a degree program sponsored by the division should come to the office (Room 121 in Titchener Hall) to be assigned academic advisors. Students not interested in a degree, but merely seeking academic advice, may do so in the Liberal Arts Office. Part-time evening students will be advised by a divisional representative available in the Information Center, Room 101 of the Library.

TRANSFER

Students who have earned A.A. or A.S. degrees at Broome Community College and who intend to go on for baccalaureate degrees are guaranteed transfer to some four-year college or university of the State University of New York (SUNY). There is no guarantee, however, that students can complete all degree programs at transfer institutions in four semesters.

Students are urged to learn as much as they can about program requirements at the institution(s) to which they might transfer. For example, many four-year schools require foreign language. The decision to take a language at Broome Community College might thus be influenced by whether or not it is required at the college to which one intends to transfer.

The Liberal and General Studies Division has in force a number of guaranteed transfer arrangements with other public and private colleges. Inquiries about these agreements should be made in Titchener Hall, Room 121 or the Counseling and Student Development Center, Wales, Room 200.

CAREER PREPARATION

For a great number of careers a broad background in liberal studies, as is presented in the Associate in Arts (AA) and Associate in Science (AS) degree programs, is essential. Students are urged to utilize the college's resources thoroughly, and as early as possible, in locating useful information about their intended academic majors and their career aspirations.

The divisional advisement system is one which aims to match students with advisors who share their interests. If questions pertaining to career preparation, transfer opportunities and job placement cannot be answered by the faculty advisors, students will be directed to somebody who can. The following is a diagram of the career guidance support system.

Faculty Advisor	Liberal & General Studies Division Office, Room T-121	Career Counselor/ Transfer Counselor (Counseling Ctr. Rm W-200)

To start students thinking about a career and the preparation needed, a number of fields which suggests a liberal studies background are listed below. The college does not offer courses in all these areas, and in some cases the professional courses are taught only at the junior/senior level in baccalaureate programs.

Acting
Advertisement
Architecture
Art
Chiropractic
Commercial Art
Communications
Community/Human Service
Computing
Counseling
Criminal Justice
Data Processing
Dentistry
Design
Energy Research
Environment
Foreign Service
Forestry
Government Service
Home Economics
Interior Design
International Business
Journalism
Labor Relations
Law
Library Science
Management
Media Communications
Medicine
Mental Health
Music
Oceanography
Optometry
Paralegal
Personnel
Physical Therapy
Psychologist
Public Administration
Public Relations
Public Service
Publishing
Real Estate
Recreation
Social Work
Scientific Research
Sports Writing
Teaching
Technical Writing
Translating
Transportation
Travel/Tourism
Urban Planning
Writer/Critic

COMMUNICATION WITH STUDENTS

The division maintains bulletin boards in the Titchener Hall lobby and outside the office in Titchener Hall, Room 121. Students are urged to check the boards regularly for information pertaining to academic advisement, career planning, cultural events, transfer opportunities, convocations and lectures, concerts, and the like. Important notices and messages for students will also be posted. **Check the Boards!**

LIBERAL AND GENERAL STUDIES

The Liberal and General Studies curriculum is mainly a two-year university-parallel program designed especially for those who wish to continue their college education at a four-year school. Graduates of the College in its Liberal and General Studies Arts program receive either the Associate in Arts or Associate in Science degrees, depending on which course of study they complete.

Students completing this curriculum, its science option or its other emphases will have a breadth of education that prepares them for many professional careers. The Science Option, for example, is excellent for those planning careers in forestry, chemistry, biology or medicine. Those aspiring to careers in the various professions will find alternatives in the Liberal and General Studies curriculum designed especially for them.

Students should be aware that many of these alternative curriculums presume a high level of preparation in the secondary school, and they should consult with faculty advisors or counselors when there is doubt about the adequacy of their pre-college academic background.

Prospective academic majors in the humanities, social sciences, biological sciences and physical education are also taught and advised by divisional faculty and staff.

ASSOCIATE IN ARTS DEGREE

	Credits Required
English	6
ENG 110 and 120 Written Expression I and II	
History	6
HIS 100 Rise of the West or HIS 115 Modern Global History plus one other history (HIS) course.	
Mathematics or elective (as advised)	0-8
Students who have completed fewer than 3 units of secondary school mathematics (through Intermediate Algebra or "Course III")* are required to take a minimum of 2 semesters of college level mathematics. Students who have completed 3 units of secondary school mathematics (through Intermediate Algebra or "Course III") are required to take one semester of college level mathematics. Students who have completed more than 3 units of secondary school mathematics (including Intermediate Algebra or "Course III") are not required to take additional mathematics. They may, however, elect an appropriate math course or an elective in another field.	
Laboratory Science	8
A full-year sequence of Biology, Chemistry, Physics or Physical Science. Acceptable sequences: BIO 111-112 General Biology I and II; BIO 131-132 Human Biology I and II; BIO 150-151 Microbiology and Aquatic Biology; CHM 141-142 General Chemistry; CHM 145-146 Chemistry; PHY 161-162 Physics; PHS 113, 114, 115, or 116 Physical Science (any 2).	
Philosophy or Foreign Language Sequence	6-8
Students are encouraged to take both, but they must complete a year (6-8 credit) of either a philosophy or a foreign language sequence.	
Physical Education	**2**
No more than 2 credits can be used to fulfill degree requirements.	
Literature	6
Any 2 LIT courses	
Social Science	6
Any 2 courses from the following disciplines: anthropology, economics, geography, political science, psychology, sociology, social sciences. These have ANT, ECO, GEO, POS, PSY, SOC, SOS designators.	
Electives	14-24
Selections from approved listing preceding each semester's registration. Exceptions to receive approval of Dean of the LA Division.	
Total number of credits	**64 minimum**

*General Math and Business Math cannot be used in meeting this requirement.

ASSOCIATE IN SCIENCE DEGREE: SCIENCE OPTION

This program is designed for students planning careers in biology and forest biology, chemistry and forest chemistry, the physical sciences, medicine, dentistry and related fields.

FIRST YEAR	Credits Required Per Year
English	6
ENG 110 and ENG 120 Written Expression I and II	
History	6
HIS 100 The Rise of the West or HIS 115 Modern Global History and any other history (HIS) course.	
Mathematics	8
MAT 181 and 182 Calculus with Analytic Geometry I and II, or if a student is not prepared for these courses, he or she may take MAT 139 Algebra and or MAT 140 Trigonometry or MAT 161 Pre-Calculus mathematics first.	
2 Laboratory Science Sequences	16
BIO 111 and BIO 112 General Biology I and II and CHM 145 and CHM 146 Chemistry for those planning careers in medicine, veterinary medicine, dentistry, forest biology, marine biology, pharmacy or forest chemistry.	
Physical Education	2
Any PED courses (no more than 2 credits)	
SECOND YEAR	
Literature	6
Any 2 LIT courses	
Social Science	6
Any 2 courses from the following disciplines - anthropology, economics, geography, political science, psychology, sociology, social science. These have ANT, ECO, GEO POS, PSY, SOC, and SOS designators.	
Mathematics, Philosophy or Foreign Language	6-7
A student must fulfill the mathematics requirements (above) before taking a philosophy or foreign language course. If the student wishes to take a math course more advanced than MAT 182 then he or she with the dean's approval may take another mathematics course. If the math requirement has been completed and the student does not elect to take additional mathematics, then he or she is required to take philosophy or foreign language courses.	
Total number of credits	**72 minimum**

COMMUNICATION AND MEDIA ARTS

DEPARTMENT CHAIRMAN, Paul Chambers
Titchener Hall, Room 121
Telephone 771-5163

PROGRAM COORDINATOR, John Butchko
Titchener Hall, Room 103 Telephone 771-5101

The program of instruction in Communications and Media Arts comprises theoretical and practically-oriented course offerings in audio and visual modes of communication, including film, photography, audio and video production, and various type of written communication. Communications courses will emphasize acquisition of technical proficiency, theoretical knowledge and where appropriate, aesthetic sensibility.

The program aims, on the one hand, to prepare graduates for immediate employment in a variety of communications-related occupations, and on the other hand, for transfer to Baccalaureate programs.

Graduates entering the job market after earning the associate degree will seek employment as audio-visual production technicians, radio/TV production assistants, audio-visual coordinators, educational media technicians, and media sales representatives.

Those transferring to upper division colleges will major in audio-visual technology, film and photography, communications, radio and TV broadcasting, journalism, graphic design and reproduction, acting and advertising. Subsequently, they will seek employment as photographers, filmmaker/cinematographers, scriptwriters, media producers, broadcasters, newspaper reporters, studio technicians, graphic designers for A-V production, instructional media specialists, video and audio engineers, copy writers, media directors, production media specialists, and sales or marketing managers.



FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
ENG 110	Written Expression I	3	0	3
*HIS 100	Rise of the West	(3)	(0)	(3)
or				
HIS 115	Modern Global History	(3)	(0)	(3)
COM 100	Communication, Media & Society	3	0	3
COM	COM elective (choose one)	3	0	3
	-COM 110 Intro to Photography			
	-COM 125 Intro to Audio Theory & Production			
	-COM 130 Intro to Video Theory & Production			
MAT	Mathematics elective	4	0	4
PED	Physical Edu. elective	0	2	1
		16	2	17

*Prospective journalism majors may enroll in ENG 163.

Spring Semester

ENG 120	Written Expression II	3	0	3
COM	COM elective (choose two)	6	0	6
	-COM 110 COM 112 COM 125 COM 130 ENG 163			
	ART/MUST/THR elective	3	0	3
	Science Elective	3	3	4
PED	Physical Edu. elective	0	2	1
		15	5	17

SECOND YEAR
Fall Semester

COM 200	Image Theory for Film, Photography and TV	3	0	3
PHI	Philosophy Elective	3	0	3
COM	COM electives (choose two)	6	0	6
	-COM 110 COM 112 COM 125 COM 130 COM 140 COM 203 ENG 163 ENG 165 ENG 166			
CST 105	Understanding Computers	2	2	3
		14	2	15

Spring Semester

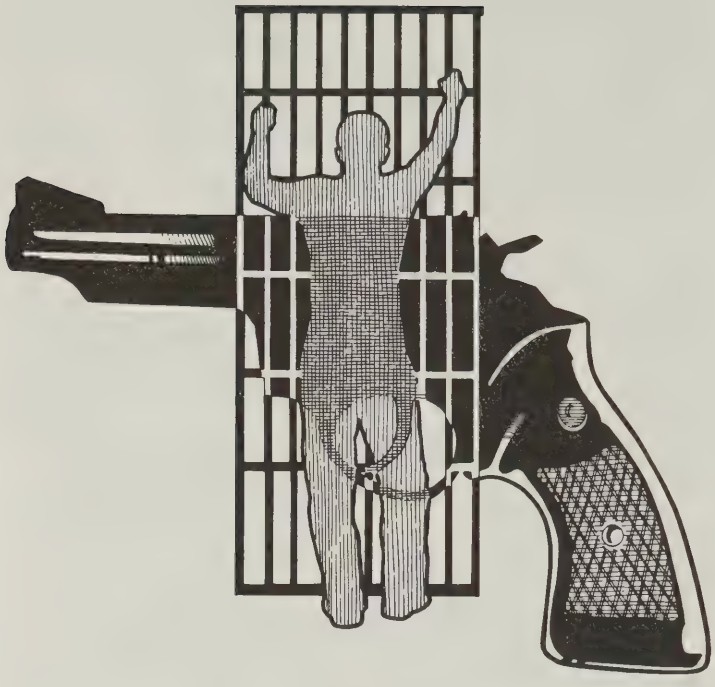
COM 115	Writing for the Media	3	0	3
COM	COM electives (choose two)	6	0	6
	-COM 110 COM 112 COM 125 COM 130 COM 135 COM 140 COM 200 COM 203 COM 204 COM 210 COM 260 COM 299			
COM 250	Internship	(3)	(0)	(3)
	ART/MUS/THR elective	3	0	3
		15	0	15

*Social Sciences recommended.

CRIMINAL JUSTICE

DEPARTMENT CHAIRMAN, Francis J. Short
Special Career Programs
Mechanical Building, Room 214
Telephone 771-5087

COORDINATOR, Appointment Pending



This program is designed for full-time students desiring employment after two years of study. Careful planning and selection of courses is necessary to complete the program in two years. Consult the Criminal Justice Coordinator for specific details on selection of proper electives. Criminal Justice electives are described on page 90 and some Criminal Justice courses are given in the evening only.

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
ENG	110 Written Expression I	3	0	3
PSY	110 General Psychology	3	0	3
SOC	110 Introduction to Sociology	3	0	3
CRJ	101 Introduction to Criminal Justice	3	0	3
CRJ	125 Penal Law	3	0	3
		15	0	15

Spring Semester

ENG	120 Written Expression II	3	0	3
POS	201 American Political Systems	3	0	3
CRJ	212 Criminal Procd. & Const. Law	3	0	3
CRJ	105 Corrections	3	0	3
PHI	Elective in Philosophy (PHI 201 or PHI 206 recommended			

SECOND YEAR
Fall Semester

	Math/Science Elective	3-4	0	3-4
PSY	Elective in Psychology	3	0	3
SOC	Elective in Sociology	3	0	3
CRJ	115 Juvenile Justice	3	0	3
CRJ	Criminal Justice Elective	3	0	3
		15-16	0	15-16

Spring Semester

SPK	102 Effective Speaking	3	0	3
	Math/Science Elective	3-4	0	3-4
CRJ	*Criminal Justice Course	3	0	3
CRJ	Criminal Justice Elective	3	0	3
	**Free Elective	3	0	3
		15-16	0	15-16

*CRJ 215 Police Administration or CRJ 230 Criminal Investigation required.
**Social Sciences recommended.

EARLY CHILDHOOD EDUCATION

DEPARTMENT CHAIRMAN, Francis J. Short
Department of Special Career Programs
Mechanical Building, Room 214
Telephone 771-5087

COORDINATOR, Marilyn Schafer
Mechanical Building, Room 219, Telephone 771-5029

The Early Childhood program leads to an Associate in Applied Science designed to prepare graduates for immediate employment or, in the case of those students who are already working in the Early Childhood field when they enroll, to improve their capabilities and increase their opportunities for advancement. It is open to students on both a full-time and part-time basis.

The starting salary for graduates of the AAS degree program in Early Childhood who go to work immediately after graduation as aides or assistant teachers varies between $4 and $5 per hour. Director's positions usually require a baccalaureate degree with an average salary of $14,000 to $17,000 a year. Two year college graduates sometimes become directors with an additional salary which will vary with teacher's salaries.

A professional portfolio of materials pertaining to the education of young children is required of all students in the program. Assistance is provided in all classes for development of this material.

A Red Cross Safety and First Aid Certificate is recommended. Arrangements for this training are made each semester by the department. Added fee required.

PLEASE NOTE

The curriculum display shown here is for full-time students, and they should be aware that careful advisement is necessary to enable them to be properly scheduled in this program to complete the work in two years. Anyone interested in enrolling as a full-time student should, therefore, consult with the coordinator or department chairman first. The curriculum display for part-time students appears on page 70.

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
ENG	110	Written Expression I	3	0	3
PSY	110	General Psychology	3	0	3
*CDC	110	Introduction to Education of Young Children	2	2	3
†CDC		Early Childhood Elective	2-3	0-2	3
CDC	175	Techniques of Observation and Evaluation	3	0	3
			13-14	2-4	15

Spring Semester

ENG		English or Literature Elective	3	0	3
PSY	211	Child Development	3	0	3
*CDC	120	Cirriculum Development	2	2	3
		Humanities Elective	3	0	3
		†Related Elective	3	0	3
			14	2	15

SECOND YEAR
Fall Semester

*CDC	170	Practicum I			3
†CDC		Early Childhood Elective	2-3	0-2 .. 3	
		Math/Science Elective	3-4	0-3	3-4
†CDC		Early Childhood Elective	2-3	0-2	3
		†Related Elective	3	0	3
			10-13	0-7	15-16

Spring Semester

SOC	110	Introduction to Sociology	3	0	3
*CDC	290	Practium II			6
†CDC		Early Childhood Elective	2-3	2-0	3
		Math/Science Elective	3-4	0-3	3-4
			7-9	2-7	15-16

***CDC COURSES ARE GIVEN MAINLY IN THE EVENING.**

†CDC electives may be taken from among CDC 115 Music for Young Children, CDC 140 Art for Young Children, CDC 150 Motor Development, CDC 160 Nutrition for Young Children, CDC Child Health and Safety, CDC 210 Special Programs in Children, CDC 220 Issues and Innovations in Early Childhood, CDC 245 Social Development of Young Children, CDC 250 Language in Early Childhood, CDC 230 Working with Parents Programs, LIT 263 Children's Literature, CDC 190 Infants, Toddlers and the Family, THR 117 Creative Dramatics, THR 201 Children's Theatre. @Related electives may be taken from among PSY 212 Adolescent Development, PSY 214 Abnormal Psychology, PSY 217 Counseling and Interviewing, PSY 227 Behavior Modification, SOC 210 Crime and Deviant Behavior, SOC 230 Marriage, Family and Divorce, SAC 101 The Individual in a Changing Environment, SAC 295 Seminar in Human Potential or from other disciplines with permission of the coordinator or department chairperson.

MENTAL HEALTH (COUNSELING PSYCHOLOGY AND SOCIAL WORK) EMPHASIS (Associate In Science Degree)

COORDINATOR, Charles Croll
Room 227, Business Building
Telephone 771-5298

This course of study is mainly for students who wish to transfer to upper division degree programs in mental health, such as social work and counseling psychology, and for those already in entry level positions in appropriate public and private agencies. Broad preparation during the first year is followed by greater concentration during the second year.

The number of students permitted to enter the second year of the program is limited by the availability of field placement openings in local agencies. Selection will take place during the spring semester of the Freshman year. Students who do not qualify can still complete A.A. degree requirements within the normal two-year period. For further details inquire at the Liberal and General Studies Division Office in Titchener Hall, (Room 121).

FIRST YEAR Fall Semester			Credits
ENG	110	Written Expression I	3
MAT		(MAT 124 Statistics recommended)	3-4
HIS	100	Rise of the West	3
		Laboratory Science	
		(BIO 131 Human Biology I recommended)	4
PSY	110	General Psychology	3
PED		Physical Education Elective	1
			17-18

Spring Semester			
ENG	120	Written Expression II	3
SOC	110	Introduction to Sociology	3
		Laboratory Science	
		(BIO 132 Human Biology II recommended)	4
HIS	186	Modern American Social History	3
PED		Physical Education Elective	1
			17

SECOND YEAR Fall Semester			Credits
PSY	223	Intelligence and the Mentally Retarded	3
PSY	217	Counseling and Interviewing	3
		English or Humanities Elective	3
SOS	288	Seminar in Community Social Service Organizations	3
		†Liberal Arts Elective	3
			15

Spring Semester			
PSY	227	Behavior Modification	3
PSY	214	Abnormal Psychology	3
SOS		Introduction to Social Work	3
SOS	290	Social Science Field Work*	3
PHI		Philosophy Elective	3
			15

*This internship experience generally involves 6 hours a week in such agencies as Binghamton Psychiatric Center, Broome Developmental Center, Association for Retarded Children, Broome County Social Services, Broome County Office for the Aging, PROBE, Planned Parenthood, Binghamton City Schools.

†Students receiving credit for SOS 150 Introduction to Human Service Work may be used in any other program.

NOTE—Students interested in an emphasis in Social Work may substitute sociology or other approved elective.

LIBERAL AND GENERAL STUDIES SPECIAL CAREER PROGRAMS

DEPARTMENT CHAIRMAN, Francis J. Short
Mechanical Building, Room 214
Telephone 771-5087

EARLY CHILDHOOD
Coordinator, Marilyn J. Schafer
Mechanical Building, Room 219
Telephone 771-5029
page 53

CRIMINAL JUSTICE
Coordinator, Michael J. Palmiotto
Mechanical Building, Room 219
page 52

FIRE PROTECTION TECHNOLOGY
Coordinator, Anthony J. Winkler
Mechanical Building, Room 214
Telephone 771-5087
page 73

PARALEGAL ASSISTANT
Coordinator, Matthew A. Vitanza
Mechanical Building, Room 214
Telephone 771-5087
page 73

INDIVIDUAL STUDIES
Coordinator, Francis J. Short
Mechanical Building, Room 214
Telephone 771-5087
Below

INDIVIDUAL STUDIES

DEPARTMENT CHAIRMAN, Francis J. Short
Department of Special Career Programs
Mechanical Building, Room 214
Telephone 771-5087

To provide opportunities for students with unusual needs, or interests, Broome Community College allows **selected students** to structure individualized degree programs. The program requires the student to develop, with an advisor, an "area of concentration." **This area of concentration must be a cohesive program of study which the student can justify as having both educational and personal relevance.**

Completion of the Individual Studies Program can lead to an Associate in Science (AS) or Associate in Applied Science (AAS) degree, depending on the student's area of concentration. The AS degree program is designed for maximum transfer possibilities, and the AAS degree has better immediate employment opportunities. **Admission into the program requires development of a Plan of Studies which is approved by the department chairman. This plan is developed by the student with a specific educational or career goal in mind.**

Associate in Science Degree (60 credits)
- 30 Credits in English, Humanities, Natural Sciences, Mathematics and Social Sciences.
- 30 Credits in student's Area of Concentration.

Associate in Applied Science Degree (60 credits)
- Minimum of 20 semester credits in Liberal Arts and Sciences to include:
 6 Credits in Humanities (Maximum of 3 hours in Speech)
 6 Credits in Social Science
 8 Credits in Natural and Physical Science, including Mathematics
- 10 Credits of Technical Electives
- 30 Credits in student's Area of Concentration

For additional information contact the Department Chairperson.

MODEL PROGRAMS for Liberal Arts and General Studies Minimum Credit - 64 (Associate in Arts Degree)

These model programs are designed to help students with identifiable career or academic interests get an early start. All courses in the concentration are lower division offerings. You are advised to review transfer requirements of a range of baccalaureate granting colleges early on to ensure that your course selections align with transfer requirements. Assistance: Room T-121 or the Counseling and Student Development Center.

Students with advanced placement credit and those with 3½ units of academic mathematics will be able to take additional elective courses with their advisor's approval.

Students who enter with academic deficiencies may have to take more than the minimum 64 credits to earn the Associate of Arts degree. For example, students deficient in written communication will take ENG 090 Basic Language Skills before registering in ENG 110.

ART

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT electives	(6)
HIS 100	(3)	HIS electives	(3)
MAT electives	(0-8)	Laboratory Science Sequence	(8)
Philosophy or Foreign Language	(6-8)	Social Science electives	(6)
*PHI 111 and 112		ART electives	(9)
ART electives	(12)	ART 215, 216	
*ART 115, 101		*ART 105 or 106	
*ART 116, 140		Physical Ed. electives	(2)
Total	35-37	Total	34

BUSINESS

(For Transfer to Baccalaureate Programs in Business)
This model is appropriate for transfer to SUNY Binghamton School of Management

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT electives	(6)
HIS 110 and HIS elective	(6)	Laboratory Science sequence	(8)
*MAT 124 and 146 or 181	(6-7)	ECO 110 and 111	(6)
Philosophy or Foreign Language	(6-8)	Business electives	
Physical Ed. electives	(2)	*BUS 100 and 101	(8)
Business electives		*BUS 245	(3)
*BUS 110	(3)	†CST 105, 118, 110, 120	(3)
*BUS 118	(3)		
Total	32-34	Total	34

CIVIL AND PUBLIC SERVICE

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT electives	(6)
HIS 100 and HIS elective	(6)	Philosophy elective	(3)
*HIS 131		*PHI 206	
Philosophy or Foreign Language	(3-4)	Social Science elective	(3)
MAT electives	(0-6)	*POS 204	
*MAT 124		Related electives	(20)
Laboratory Science sequence	(8)	ECO 104, 110, 111	
Social Science elective	(3)	PSY 110	
*POS 201		SOC 110, 111	
Physical Ed. electives	(2)	BUS 100	
		BUS 245, 257	
Total	34-35	Total	32

CRIMINAL JUSTICE

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	Laboratory Science sequence	(8)
HIS 100 or 115	(3)	*CHM 140 and 141	
MAT electives	(0-8)	Philosophy or Foreign Language	(6-8)
†MAT 117		LIT electives	(6)
*MAT 124		Criminal Justice electives	(9)
POS 201	(3)	Free electives	(3)
Social Science Elective	(3)	*SOC 210	(3)
*PSY 110 and SOC 110			
Criminal Justice electives	(6)		
*CRJ 100			
Physical Ed. electives	(2)		
Total	34	Total	35-37

CYTOTECHNOLOGY

(For Transfer to Upstate Medical Center
"B grades in science courses required)

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	BIO 131	(4)
BIO 111 and 112	(8)	LIT electives	(6)
CHM 145 and 146	(8)	Social Science electives	(6)
BIO 132 or BIO 150	(4)	Philosophy or Foreign	
BIO 150	(4)	Philisophy or Foreign Language	(6-8)
MAT 124	(3)	Elective	(3)
HIS 100 and HIS elective	(6)		
Physical Ed. electives	(2)		
Total	37	Total	25-27

DESIGN ARTS

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(3)	Laboratory Science sequence	(8)
HIS 110 and HIS elective	(6)	LIT electives	(6)
MAT electives	(0-8)	Social Science electives	(6)
Philosophy or Foreign Language	(6-8)	*PSY 110	
*PHI 111 and 112		Design electives	(12)
Design electives	(6)	*INT 110	
*ART 105, 106		†ART 115	
*INT 101		†CIV 159	
Physical Ed. electives	(2)		
Total	31-33	Total	32

EARLY CHILDHOOD

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	HIS 110 and HIS elective	(6)
MAT electives	(0-8)	Philosophy or Foreign Language	(6-8)
Laboratory Science sequence	(8)	LIT electives	(6)
*BIO 131 and 132		*LIT 263	
Social Science	(6)	Early Childhood electives	(9)
*PSY 110		Free electives	(6)
*SOC 110		†PSY electives	
Early Childhood Electives	(6)	†THR or MUS electives	
*CDC 110			
Physical Ed. electives	(2)		
Total	36	Total	33-35

ELEMENTARY EDUCATION

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT electives	(6)
HIS 110 and HIS elective	(6)	*LIT 263	
MAT 119 and 120	(6)	Philosophy or Foreign Language	(6)
Laboratory Science sequence	(8)	*Philosophy 203 and elective	
Physical Ed. electives	(6)	Physical Ed. electives	(1)
Social Science Electives	(6)	Electives	(18)
*PSY 110		PSY 221, 212	
*SOC 110		*ART electives	
*GEO 110		*MUS electives	
		†PHY 227	
		†ANT 111	
For Elementary Teachers			
Total	33-35	Total	31

FOREST RESOURCES MANAGEMENT

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
*ENG 110 and 120	(6)	Philosophy or Foreign Language	(6-8)
HIS 110 and 220	(6)	LIT electives	(6)
MAT 181	(4)	Social Science electives	(6)
		*ECO 110 POS 201	
Laboratory Science sequence	(8)	Laboratory Science	(4)
*BIO 111 and 112			
Physical Ed. electives	(2)	*PHY 161, CST 110	(3)
Electives	(8)	Free electives	(3)
*CHM 145 and 146		†PSY 110, SOC 110, 111	
		*POS 204, MAT	
Total	34	Total	28-30

FOREST TECHNOLOGY

FIRST YEAR Courses (Credits)		SECOND YEAR (Wanakena)
ENG 110 and 120	(6)	
MAT 139 and 140	(8)	
ECO 110 or 111	(3)	
BIO 111 and 112	(8)	
Electives		
*BIO electives		
Total	31	

JOURNALISM

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	Laboratory Science sequence	(8)
HIS 100 and HIS elective	(6)	LIT electives	(6)
MAT electives	(0-8)	Social Science electives	(6)
Philosophy or Foreign Language	(6-8)	Journalism electives	(12)
*Foreign Language		*ENG 164	
Physical Ed. electives	(2)	*ENG 165	
Journalism electives	(6)	†COM 110	
*ENG 163		†SPK 102	
*COM 100		†COM 125, 130	
Total	34-36	Total	32

LANDSCAPE ARCHITECTURE

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT electives	(6)
		CIV 115	(5)
HIS 100 and HIS elective	(6)	Social Science electives	(6)
MAT electives	(0-8)	Philosophy or Foreign Language	(3-4)
*MAT 139, 40		Related courses	(12)
Laboratory Science sequence	(8)	*CIV 114 *ART 105	
*BIO 111, 112		*CIV 111 *ART 106	
Philosophy or Foreign Language	(3-4)	*CST 110	
Physical Ed. electives	(2)	*PHS 116 *ART 115	
		†PHY 161	
		†MAT 181, 182	
		†INT 101	
Total	33-34	Total	32-33

MEDICAL TECHNOLOGY

(For Transfer to Upstate Medical Center "B" grades in science courses required)

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	BIO 131	(4)
BIO 111 and 20	(8)	BIO 150	(4)
CHM 145 and 146	(8)	CHM 245	(5)
MAT 161 or equivalent	(4)	PHY 161	(4)
HIS 100 and HIS elective	(6)	Philosophy or Foreign Language	(3-4)
Philosophy or Foreign Language	(3-4)	Social Science electives	(6)
Physical Ed. electives	(1)	CHM 224	(4)
		LIT electives	(6)
		Physical Ed. electives	(1)
Total	36-37	Total	37-38

MUSIC AND MUSIC EDUCATION

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	Laboratory Science sequence	(8)
HIS 100	(3)	History elective	(3)
MAT electives	(0-6)	LIT electives	(6)
Philosophy or Foreign language	(6-8)	Social Science electives	(6)
†Italian or		†ANT 111	
†PHI 111, 112		Physical Ed. electives	(1)
Physical Ed. electives	(1)	*Music electives	
*Music electives		MUS 190 MUS 192	
MUS 190 MUS 192		MUS 193 MUS 194	
MUS 193 MUS 194		MUS 195 MUS 196	
MUS 195 MUS 196		*Applied Music	
*Applied Music		MUS 297 MUS 298	
MUS 197 MUS 198		*Introduction To Music	
*Music Theory		MUS 101	
MUS 105 MUS 106		(Additional courses)	
		MUS 180, MUS 185	
Total	32-34	Total	31

MUSEUM CAREERS

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	HIS elective	(3)
HIS 100	(3)	Laboratory Science sequence	(8)
MAT electives	(0-6)	LIT electives	(6)
*MAT 124		Social Science electives	(6)
Philosophy or Foreign Language	(6-8)	*ANT 110/111	
*Foreign Language		†PSY 110	
Physical Ed. electives	(2)	†SOC 110	
Electives	(7-10)	Electives	
*ART 101, 105		*INT 101, *ART 106	
*PHI 111/112		†BUS 110, †ECO 110	
Total	30-35	Total	32

PHYSICAL EDUCATION/RECREATION

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT elective	(6)
HIS 100 and HIS elective	(6)	Social Science electives	(6)
MAT electives	(0-6)	*SOC 110	
Philosophy or Foreign Language	(6-8)	*PSY 211 or 212, 223, 227	
*PHI 203 and elective		Laboratory Science sequence	(8)
PED 132	(2)	*BIO 131, 132	
Related electives	(0-6)	Related electives	(12)
*PSY 110			
*ART, MUS, THR, SPK			
Total	32-34	Total	32

PHYSICAL THERAPY

(For Transfer to Health Science Center at Syracuse "B" grades in all required courses)

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	PHY 161 and 162	(8)
MAT 161		PSY 110 and 211	(6)
(181 recommended)	(4)	SOC 110	(3)
BIO 111 and 112	(8)	HIS elective	(3)
CHM 145 and 146	(8)	Philosophy or Foreign Language	(6-8)
HIS 100 and HIS elective	(6)	LIT electives	(6)
		Physical Ed. electives	(2)
Total	32	Total	34-36

PRE-LAW

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT electives	(6)
HIS 100 and HIS elective	(6)	Social Science electives	(6)
MAT electives	(0-8)	Electives	(18)
Laboratory Science sequence	(8)	POS 201, 204	
Foreign Language or Philosophy	(6-8)	ECO 110, 111, 104	
PHI 206		SOC 110, 111	
PHI 203		HIS 130, 131	
		PSY 110	
		BUS 100	
		PHI 201, 206, 202	
		ART, MUS, THR	
		Physical Ed. electives	(2)
Total	34-36	Total	32

PUBLIC HISTORY

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT electives	(6)
HIS 100 and 131	(6)	*LIT 210, 211, 230	
MAT electives	(0-8)	Social Science electives	(6)
*MAT 124		*POS 201, 204	
Philosophy or Foreign Language	(6-8)	*PSY 110, SOC 110	
Physical Ed. electives	(2)	Laboratory Science sequence	(8)
Electives	(3-9)	Electives	(12)
*HIS 175		*SOC 120	
*POS 201		*HIS 130, 170, 180	
*POS 204		*SOC 120, 130	
		†ECO 110, 111	
Total	31-39	Total	32

SPECIAL EDUCATION

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT electives	(6)
HIS 100 and HIS elective	(6)	Philosophy or Foreign Language	(3-4)
MAT electives	(6)	*PHI 203	
*MAT 113, 119, 114, 120		Social Science elective	(3)
Laboratory Science sequence	(8)	*SOS 288	
*BIO 131, 132		Physical Ed. electives	(2)
Social Science elective	(3)	Related electives	(18)
*PSY 110		*PSY electives	
Philosophy or Foreign Language	(3-4)	*MUS, THR, ART	
*PHI elective		*HUS 120	
		*SOS 290	
Total	32-33	Total	32-33

THEATER

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	Labortory Science sequence	(8)
HIS 100 and HIS elective	(6)	LIT electives	(6)
MAT.electives	(0-6)	*LIT 203, 233	
Philosophy or Foreign Language	(6-8)	Social Science elective	(6)
Physical Ed. electives	(2)	†PSY 110	
Theater electives	(6)	Theater electives	(12)
*THR 190		*THR 190	
*THR 111, 112		*THR electives	
*THR 221			
Total	32-34	Total	32

ONE PLUS ONE AND SPECIAL AGREEMENT PROGRAMS

These are special Agreement Programs with other Colleges and Universities in which students spend either their first year of first two years at Broome and their last year(s) at another institution.

HUMAN DEVELOPMENT AND FAMILY STUDIES (SUNY College of Human Ecology at Cornell)

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT Electives	(6)
*HIS 100 or 115 and elective	(6)	MAT elective	(3)
MAT 124	(3)	PSY 211 and 212	(6)
PSY 110	(3)	Social Science Elective	(6)
*BIO 131 and 132	(8)	FREE ELEctives	(9)
Philosophy or Foreign Language	(6-8)	Physical Education	(1)
Physical Education	(1)		
Total	33-35	Total	31

FOREST CHEMISTRY (SUNY College of Environmental Science and Forestry, Syracuse)

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT Electives	(6)
*HIS 100 or 115 and elective	(6)	CHM 245, 246	(10)
BIO 111 and 112	(8)	PHY 161, 162	(8)
CHM 145 and 146	(8)	ECO 110	(3)
MAT 181	(4)	Social Science Elective	(3)
Philosophy Elective	(3)	Philosophy Elective	(3)
		Physical Education	(2)
Total	35	Total	35

RESPIRATORY THERAPY (1 + 1) (Transfer to Upstate Medical Center)

FIRST YEAR Courses (Credits)		
ENG 110 and 120	(6)	—GPA requirement is 3.0 (B)
*HIS 100 or 115 and elective	(6)	
Philosophy or Foreign Language	(6-8)	—Requires also observation or volunteer work in a respiratory therapy setting.
Laboratory Science *BIO 131 and 132	(8)	
MAT Elective	(3-4)	
Physical Education	(2)	
Total	31	

SOCIAL WORK (SUNY College of Human Ecology at Cornell)

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT Electives	(6)
*HIS 100 or 115 and elective	(6)	Philosophy or Foreign Language	(6-8)
Laboratory Science sequence *BIO 131 and 132	(8)	CRT 105 or 115	(3)
		PSY 211, 212	(6)
MAT elective	(3)	SOC 230	(3)
PSY 110 and SOC 110	(6)	ELECTIVES SOC 210, POS 204 ECO 110/111, PSY 227, ANT 111	(18-21)
Physical Education	(2)		
Total	31	Total	33

Broome Community College

ENVIRONMENTAL AND FOREST BIOLOGY (SUNY College of Environmental Science and Forestry, Syracuse)

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT Electives	(6)
*CHM 145 and 146	(8)	Philosophy or Foreign Language	(6-8)
BIO 111 and 112	(8)	CHM 245 and 246	(10)
MAT 181	(4)	Social Science Electives	(6)
HIS 100 or 115 and elective	(6)	PHY 161 and 162	(8)
Physical Education Elective	(2)		
Total	34	Total	36-38

CONSUMER ECONOMICS AND HOUSING (SUNY College of Human Ecology at Cornell)

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT Electives	(6)
*MAT 145 and 146	(6)	ECO 110 and 111	(6)
HIS 100 or 115 and elective	(6)	CST 110	(3)
Laboratory Science Electives BIO 131/132 or CHM 145/146 or PHY 161/162	(8)		
		POS 201	(3)
Philosophy or Language	(6-8)	BUS 141	(3)
Physical Education	(2)	PSY 110	(3)
		SOC 110	(3)
		Free Electives	(3)
Total	34-36	Total	30

INTERIOR DESIGN/HUMAN ENVIRONMENT (SUNY College of Human Ecology at Cornell)

FIRST YEAR Courses (Credits)		SECOND YEAR Courses (Credits)	
ENG 110 and 120	(6)	LIT Electives	(6)
HIS 100 or 115	(3)	Philosophy or Foreign Language	(6-8)
ART 101	(3)	PSY 110	(3)
ART 105 and 115	(6)	Social Science Elective	(3)
INT 110	(3)	INT 101	(3)
INT 110	(3)	INT 111	(3)
Laboratory Science	(8)	ART 106	(3)
MAT 145	(3)	HIS Elective	(3)
Physical Education	(1)	Physical Education	(1)
Total	36	Total	33

*THESE COURSES ARE "STRONGLY RECOMMENDED"
†THESE COURSES ARE "RECOMMENDED"

(Freshman year BCC, Sophomore year at:)

DELHI A&T
General Agriculture
Animal Husbandry-Dairy

CANTON A&T
Mortuary Science

WANAKENA
See Forest Technology
Model Program

Details in Titchener Hall, Room 121

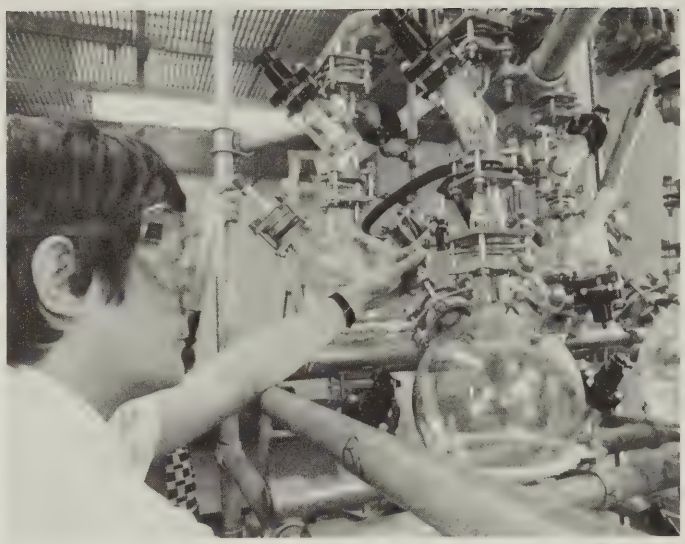
TECHNOLOGY, ENGINEERING AND COMPUTING

In the area if technical education , the College offers 10 programs. One, Engineering Science, is in effect the first two years of an engineering curriculum. Students who do satisfactory work in it should experience little difficulty in transferring to engineering colleges at the third-year level.

Four others are designed to educate engineering technicians in the fields of Chemical Engineering Technology, Civil Engineering Technology, Electrical Engineering Technology and Mechanical Engineering Technology. Students in these programs are prepared for employment in various types of technical work immediately after graduation, although many students do transfer to four-year colleges.

The Computer Studies Department offers three programs -Computer Science, Computer Technology and Data Processing. The Computer Science program is designed to prepare graduates for transfer to four-year colleges, while graduates of the other two are prepared for immediate employment or possible transfer.

Other programs in the technical field offered by the College include Industrial Technology and Tool and Die Making.



CHEMICAL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, Dr. Harold H. Trimm
Science Building, Room 108, Telephone 771-5009

The Chemical Engineering Technology curriculum is designed to meet the increasing demand for chemical technicians. Graduates are qualified for immediate gainful employment. Many of them have also continued their studies toward advanced degrees in chemistry at the junior level either as full-time students or on a part-time basis while employed. With additional physics and mathematics, some graduates have also continued their studies in chemical engineering. This background makes the Chemical Engineering Technology graduate highly sought after by employers and concurrently affords them the flexibility to advance academically and professionally.

Chemical technicians of both sexes have filled a vital manpower need in companies and organizations where background in various areas of chemistry is necessary or desirable. The Chemical Engineering Technician has opportunities to be employed in a wide variety of fields such as petroleum and other forms of energy, pharmaceuticals, plastic rubber, pulp and paper, and biological and electronic materials. Non industrial job opportunities exist in medical laboratories, municipal health and sanitation agencies, and state and federal environmental agencies.

Employers of chemical technicians include IBM (Endicott, Vermont, Mass., and Austin), Anitec, NYSEG, GE (Westover and Schenectady) Norwich-Eaton Pharmaceuticals, Sandia, Hadco, Bendix, Chenango Industries, International Paper, Eastman Kodak, Union Carbide, Grumman Aerospace, Sandoz Pharmaceuticals and many others.

Initial positions are usually in a research, development, process, quality control or analytical laboratory or in a pilot plant. In these positions a chemical technician may work for a senior staff member or be a member of a group working in a particular area. Experienced chemical technicians have become supervisors, group leaders, technical salesmen, and research and development technicians.

The 1986 graduates of this program averaged $17,676 in starting salaries ranging from $16,200 to $23,000.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET), and it leads to an Associate in Applied Science degree.

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
ENG 110	Written Expression I	3	0	3
CHM 161	Chemistry	3	4	4
*MAT 161	Pre-Calculus	4	0	4
†PHY 141	Physics	3	2	4
		13	6	15

Spring Semester

ENG 150	Technical Writing	3	0	3
CHM 162	Chemistry	3	4	4
*MAT 162	Applied Calculus I	4	0	4
†PHY 142	Physics	3	2	4
CST 140	Computer for Chemists	2	2	3
		15	8	18

SECOND YEAR
Fall Semester

CHM 251	Chemical Engineering Tech Seminar	1	0	½
CHM 261	Organic Chemistry	3	6	5
CHM 265	Analytical Chemistry	3	6	5
CHM 271	Chemical Processes	3	4	5
	Social Science Elective	3	0	3
		13	16	18½

Spring Semester

CHM 262	Organic Chemistry	3	6	5
CHM 266	Analytical Chemistry	3	6	5
CHM 272	Social Science Elective	3	0	3
		12	16	18

GRADUATION REQUIREMENT: 69½ CREDITS

*or MAT 181-182 Calculus with Analytic Geometry and I and II
†or PHY 161-162 Physics

CIVIL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, Edward F.Dougherty
Mechanical Building, Room 117
Telephone 771-5223

The Civil Engineering Technology curriculum at Broome Community College is designed to prepare graduates for technical positions in the civil engineering and construction industries. The primary objective of the program is to train engineering technicians who will work for civil engineers, heavy and building contractors, surveyors and architects.

Starting positions may be in computer aided design (CAD), drafting design, estimating, testing of materials, specification writing, construction inspection, surveying, field engineering, sales and insurance adjusting. Excellent opportunities exist for advancement and promotion.

Starting salaries over the last two years (1985/1986) averaged $16,892 and ranged from $13,000 to $23,000.

The Civil Engineering Technology Department offers the Associate in Applied Science degree in Civil Engineering Technology. This degree is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

Graduates of the program are eligible to become certified as Associate Engineering Technicians by the Institute for the Certification of Engineering Technicians.

Job opportunities exist locally, statewide and nationally. Large companies as well as smaller employers hire the graduates. Women graduates also find attractive job opportunities.

About 30% of the graduates transfer into Bachelor level programs.

In order for students to complete the curriculum in two years, the proper preparation is necessary. The minimum prerequisites are high school intermediate algebra, trigonometry and regents physics or their equivalents. For those wishing to enter the program without these prerequisites, Broome Community College offers the necessary preparatory courses.

The curriculum is comprised of various clusters of courses that result in technical areas of concentration. These clusters are in Surveying, Building and Contracting, Engineering and Architectural Drawing/Design, and Structural Design.



FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
CIV	111	Surveying I	2	6	4
CIV	115	Engineering Drawing I	1	3	2
CIV	110	Introduction to Technologies	1	0	½
ENG	110	Written Expression I	3	0	3
†MAT	161	Pre-Calculus	4	0	4
*PHY	141	Physics	3	2	4
			14	11	17½

Spring Semester

CIV	112	Curveying II	1	3	2
CIV	119	Architectural Drafting	0	4	2
CIV	124	Mechanics	3	0	3
†MAT	162	Applied Calculus I	4	0	4
PHY	142	Physics	3	2	4
ENG	150	Technical Writing	3	0	3
			15	8	18

*Students Entering the program without physics may elect to take PHY 100 Preparatory Physics I during the first semester in place of PHY 141 Physics. PHY 141 Physics may be taken during the spring semester and PHY 142 Physics and CIV 124 Mechanics during the summer. This would allow the student to graduate on schedule. Preparatory Physics is not applicable toward the degree.

†Or MAT 181-182 Calculus with Analytic Geometry I and II.

SECOND YEAR
Fall Semester

CIV	215	Strength of Materials	4	0	4
CIV	217	Materials Testing	2	3	3
CST	122	Scientific Computer Programming FORTRAN	2	2	3
		Social Science Elective	3	0	3
CIF	238	Architectural Design and Building Materials	(2)	(3)	(3)
CAD	200	Introduction to Computer Graphics	(2)	(4)	(3)
*MAT		Mathematics Elective	(4)	(0)	(4)
			13-15	5-9	16-17

Spring Semester

†CIV	224	Reinforced Concrete Design or	2	3	3
CIV	226	Structural Steel Design			
		Social Science Elective (Choose 4 courses)	3	0	3
CIV	216	Route Surveying	(2)	(3)	(3)
CIV	236	Construction Management	(3)	(0)	(3)
CIV	231	Estimating and Construction Planning	(2)	(3)	(3)
CIV	240	Soil Mechanics	(2)	(3)	(3)
CIV	237	Hydraulics	(2)	(3)	(30
*MAT		Mathematice Elective	(4)	(0)	(4)
			13-16	9-15	18-19

†Waiver of this requirement by permission of department chairperson only.

*For students planning to transfer to a 4-year college. Prior approval by department chairman required.

GRADUATION REQUIREMENTS: 69½ CREDITS

COMPUTER STUDIES

DEPARTMENT CHAIRPERSON, Paulette Gannett
Applied Technology Building, Room 054
Telephone 771-5022

The Computer Studies Department offers three different degree programs. In each one the student will learn to write modular structured programs which are well documented, easy to read and maintain. All courses will emphasize the importance of written and oral communication.

Students who choose a career in computing must, above all else, have the ability to think logically. They should be interested in organizing and analyzing information and should be able to pay close attention to detail and accuracy. Interesting and exciting careers are ahead for the student who has the personal drive to explore new fields of application and the ability to communicate with computer users.

The three degree programs are described below. The entrance requirements for each program are detailed on page 7 of this catalog. The exit requirements are shown on the pages following this one.

THE COMPUTER SCIENCE PROGRAM is designed to prepare graduates to transfer to four-year colleges and continue work toward a Bachelor of Science degree in Computer Science. During the first semester the student selects an emphasis (mathematics, technical, or business) and is encouraged to investigate transfer colleges and select elective courses with a future career in mind. The emphasis on mathematics, structured programming, science, and data structures allows transfer with Junior standing. Graduates who wish to postpone transfer can find interesting employment opportunities.

THE COMPUTER TECHNOLOGY PROGRAM places less emphasis on mathematics and more on computer hardware, digital logic and microprocessors. Graduates are prepared to work in a technical environment where a knowledge of the interface between hardware and software is necessary. Starting positions include computer operator, technician, engineering aide, associate field engineer. Average salary in 1986 was $14,600. Graduates often find that more education is desirable. Transfer to four-year schools is possible and elective courses can be selected to allow transfer with Junior standing.

THE DATA PROCESSING PROGRAM places emphasis on solving business problems. Graduates are prepared to work in a business environment where a knowledge of computer programming and application software is necessary. Starting positions include computer operator, junior programmer, date entry technician, information processing equipment operator. Average salary in 1986 was $15,067. This program has been extensively revised for 1987 to meet the requirements of the DPMA (Data Processing Management Association) Model Curriculum for Computer Information Systems. With proper choice of electives, graduates who find that more education is desirable will be able to transfer all credits to institutions offering this four-year degree.

STUDENTS CAN ATTEND FULL-TIME OR PART-TIME BOTH DAY AND EVENING Special information for part-time students can be found on pages 67-75.

COMPUTER SCIENCE (Associate in Science Degree)

The listing below shows the degree requirements. Electives are determined by the emphasis chosen. Students may select from Business, Technical, and Mathematics emphases shown on the following pages.

	Credits
CST 114 Introduction to Computing	3
CST 132 Structured Programming in Pascal	4
MAT or CST Electives	9
Electives must include either CST 202 Data Structures with Advanced Pascal or CST 218 Advanced Cobol	
MAT 181 Calculus with Analytic Geometry 1	4
MAT 182 Calculus with Analytic Geometry 2	4
MAT 250 Discrete Mathematics	4
MAT 264 Linear Algebra	4
Laboratory Science Sequence	8
A full year sequence of physics, chemistry or physical science. Acceptable sequences: PHY 141-142, PHY 161-162, PHY 181-182 Physics; CHM 145-146 Chemistry; PHS 113-114-115-116 Physical Science (any 2)	
English 110 and 120 Written Expression 1 and 2	6
Social Science	6
Any two courses from the following disciplines: anthropology, economics, geography, political science, psychology, sociology, social science. These have ANT, ECO, GEO, POS, PSY, SOC, SOS course designators.	
History	3
PHI 202 Logic	3
Physical Education	2
Approved Electives	6
See emphases for recommended electives. All others must be approved by the Department Chairperson.	

GRADUATION REQUIREMENT: 66 CREDITS



COMPUTER SCIENCE
Business Emphasis
(Associate in Science Degree)

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
CST 114	Introduction to Computing	2	2	3
CST 132	Structured Prog. in Pascal	3	2	4
ENG 110	Written Expression I	3	0	3
MAT 181	Cal I w/Analyt Geometry	4	0	4
	Social Science Elective	3	0	3
		15	4	17

Spring Semester

CST 128	Structured Prog with COBOL	3	2	4
ENG 120	Written Expression 2	3	0	3
MAT 182	Cal II w/Analyt Geometry	4	0	4
PHI 202	Logic	3	0	3
	Social Science Elective	3	0	3
	Physical Education Electives	0	2	1
		16	4	18

SECOND YEAR
Fall Semester

CST 218	Advanced COBOL	2	2	3
MAT 250	Discrete Mathematics	4	0	4
BUS 100	Accounting I	4	0	4
	Lab Science (begin sequence)	3	3	4
	History Elective	3	0	3
		16	5	18

Spring Semester

MAT 264	Linear Algebra	4	0	4
BUS 101	Accounting II	4	0	4
	Lab Science (complete sequence)	3	3	4
MAT/CST	Elective	2-4	0-4	3-4
	Physical Education Electives	0	2	1
		13-15	5-9	16-17

GRADUATION REQUIREMENTS: 69-70 CREDITS

COMPUTER SCIENCE
Mathematics Emphasis
(Associate in Science Degree)

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
CST 114	Introduction to Computing	2	2	3
CST 132	Structured Prog in Pascal	3	2	4
ENG 110	Written Expression 1	3	0	3
MAT 181	Cal I w/Analyt Geometry	4	0	4
	Social Science Elective	3	0	3
		15	4	17

Spring Semester

CST 202	Data Structures w/Adv Pascal	2	2	3
ENG 120	Written Expression 2	3	0	3
MAT 182	Cal II w/Analyt Geometry	4	0	4
PHI 202	Logic	3	0	3
	Social Science Elective	3	0	3
	Physical Education Electives	0	2	1
		15	4	17

SECOND YEAR
Fall Semester

CST 170	Digital Logic	2	2	3
MAT 250	Discrete Mathematics	4	0	4
MAT 281	Cal III w/Analyt Geometry	4	0	4
PHY 161	Physics 1	3	3	4
	History Elective	3	0	3
		16	5	18

Spring Semester

MAT 264	Linear Algebra	4	0	4
MAT 266	Intro to Higher Math	3	0	3
PHY 162	Physics 2	3	3	4
CST 220	Microproc & Assembly Language	(2)	(2)	(3)
	or			
MAT 282	Differential Equations	(4)	(0)	(4)
	Physical Education Electives	0	2	1
		12-14	5-7	15-16

GRADUATION REQUIREMENTS: 67-68 CREDITS

COMPUTER SCIENCE
Technical Emphasis
(Associate in Science Degree)

FIRST YEAR
Fall Semester

	Hours per Week		Credits per
	Class	Lab	Semester
CST 114 Introduction to Computing	2	2	3
CST 132 Structured Prog in Pascal	3	2	4
ENG 110 Written Expression 1	3	0	3
MAT 181 Cal I w/Analyt Geometry	4	0	4
Social Science Elective	3	0	3
	15	4	17

Spring Semester

CST 170 Digital Logic	2	2	3
CST 202 Data Structures w/Adv Pascal	2	2	3
ENG 120 Written Expression 2	3	0	3
MAT 182 Cal II w/Analyt Geometry	4	0	4
PHI 202 Logic	3	0	3
Physical Education Electives	0	2	1
	14	6	17

SECOND YEAR
Fall Semester

CST 180 FORTRAN, A Second Course	2	2	3
CST 220 Microproc & Assembly Language	2	2	3
MAT 250 Discrete Mathematics	4	0	4
PHY 161 Physics 1	3	3	4
History Elective	3	0	3
	14	7	17

Spring Semester

CST 225 Introduction to Small Systems	2	2	3
MAT 264 Linear Algebra	4	0	4
PHY 162 Physics 2	3	3	4
Social Science Elective	3	0	3
Physical Education Electives	0	2	1
	12	7	15

GRADUATION REQUIREMENTS: 66 CREDITS

COMPUTER TECHNOLOGY
(Associate in Applied Science Degree)

FIRST YEAR
Fall Semester

	Hours per Week		Credits per
	Class	Lab	Semester
CST 114 Introduction to Computing	2	2	3
CST 132 Structured Prog in Pascal	3	2	4
ENG 110 Written Expression 1	3	0	3
MAT 125 Statistics 1 Using Computers	3	1	3
PHY 161 Physics	3	3	4
	14	8	17

Spring Semester

CST 170 Digital Logic	2	2	3
CST 202 Data Structures w/ Adv Pascal	2	2	3
ENG 150 Technical Writing	3	0	3
SPK 102 Effective Speaking	3	0	3
PHY 162 Physics	3	3	4
	12	7	16

SECOND YEAR
Fall Semester

CST 180 FORTRAN, A Second Course	2	2	3
CST 220 Microproc & Assembly Language	2	2	3
MAT 145 Finite Mathematics	3	0	3
*Approved Elective	2-4	0-4	3-4
**Social Science Elective	3	0	3
	12-14	4-8	15-16

Spring Semester

CST 126 Assembly Programming - BAL	2	2	3
CST 222 Topics in Computer Systems	2	2	3
CST 225 Introduction to Small Systems	2	2	3
*Approved Elective	2-4	0-4	3-4
**Social Science Elective	3	0	3
	11-13	6-10	15-16

GRADUATION REQUIREMENTS: 63-65 CREDITS

*CST 150, CST 158, CST 182, CST 211, CST 213, CST 214, CST 297, MAT 161, MAT 181, MAT 182, CAD 200, CAD 201. Others require permission of Department Chairman.

**Any two courses from the following disciplines: anthropology, economics, geography, history, political science, psychology, sociology, social science. These have ANT, ECO, GEO, HIS, POS, PSY, SOC, SOS designators.

DATA PROCESSING
(Associate in Applied Science Degree)

FIRST YEAR
Fall Semester

	Hours per Week		Credits per
	Class	Lab	Semester
CST 114 Introduction to Computing	2	2	3
CST 128 Structured Programming in COBOL	3	2	4
ENG 110 Written Expression 1	3	0	3
MAT 125 Statistics 1 Using Computers	3	1	3
BUS 100 Accounting 1	4	0	4
	15	5	17

Spring Semester

CST 218 Advanced COBOL	2	2	3
CST 158 Spreadsheets-Financial Applications	2	2	3
ENG 120 Written Expression 2	3	0	3
SPK 102 Effective Speaking	3	0	3
BUS 101 Accounting 2	4	0	4
	14	4	16

SECOND YEAR
Fall Semester

CST 200 Systems Analysis 1	2	2	3
CST 213 Database Systems	2	2	3
CST/ MAT/BUS Elective	2-4	0-2	3-4
*Physical Science Elective	3	3	4
**Social Science Elective	3	0	3
	12-14	7-9	16-17

Spring Semester

CST 116 RPG II and RPG III	2	2	3
CST 201 Systems Analysis 2	2	2	3
CST 214 Operations: Procedures Management	2	2	3
CST/ MAT/BUS Elective	2-4	0-2	3-4
**Social Science Elective	3	0	3
	11-13	6-8	15-16

GRADUATION REQUIREMENTS: 64-66 CREDITS

*ANY ONE of the following physical science courses: PHS 113, 114, 115, 126

**Any two courses from the following disciplines: anthropology, economics, geography, history, political science, psychology , sociology, social science. These have ANT, ECO, GEO, HIS, POS, PSY, SOC, SOS designators.

ELECTRICAL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, Alan C. Dixon
Applied Technology Building, Room 222
Telephone 771-5017

The Electrical Engineering Technology program at Broome Community College is made up of a planned sequence of college level courses leading to the Associate in Applied Science Degree. Engineering Technology emphasizes both the theory and application of established scientific and engineering methods and prepares the student for immediate employment or for transfer to an upper division school upon graduation.

The graduate is prepared to be the interface between the design engineer and skilled craftsman. He/She translates problems into functioning equipment using his/her knowledge of mathematics, physics, linear and digital electronics, microprocessor hardware and software, machines, robotics, process control, circuit analysis, and computer programming languages. He/She does this whether working in a small company as the only technician or in a large company as part of a team.

This program may require longer than two years to complete if an entering student has not completed math 1, 2, 3 and physics in high school. Students lacking any of these courses enter our pre-electrical technology program and may be required to take MAT 104 Basic Technical Math to prepare them for MAT 139 College Algebra and MAT 140 Trigonometry or PHY 100 Preparatory Physics to prepare for Electrical Circuits and College Physics.

The department will tailor a program to match an individual student's background to the two year program. While an additional year may be required, each individual is assured the opportunity to earn the A.A.S. degree in Electrical Engineering Technology. As an accredited, state-of-the-art program, the department is proud of its graduates and their role in modern industry. Graduates are very successful and many rise to management positions in less than five years.

Graduates work for companies like New York State Electric and Gas, International Business Machines, Xerox, Eastman Kodak, General Electric, Universal Instruments, Singer-Link, Bell Laboratories, Raymond Corporation, Sandia National Laboratory, Digital Equipment Corporation, and Corning Glass.

Starting positions include engineering assistant, technical specialist for electronics, computers, field service, or sales. Starting salaries for graduates averaged $18,556 in 1986, covering a range from $9880 to $22,000.

Many graduates find that more education is desirable and have successfully completed advanced study at State University of New York Colleges at Binghamton, Utica-Rome, and Buffalo, as well as at Rochester Institute of Technology, Clarkson University, and others.

Graduates with a minimum GPA of 2.5 can transfer with full junior status into a Bachelor of Technology program at a number of institutions. Some graduates prefer a pure engineering degree and transfer to accredited Bachelor of Science programs. Usual requirements are a minimum GPA of 3.2 and appropriate additional courses in Math (MAT 181, MAT 182, MAT 281) and Physics (PHY 181, PHY 182, PHY 281).

Students use excellent state-of-the-art computer facilities which include personal computers and three VAX computers interconnected by a local area network, Ethernet. The faculty, along with large, well equipped labs and highlighted by a 30 foot high open atrium create a learning atmosphere that is first class.

The program has grown in its 40 years to embrace the areas of microprocessors, robotics, and fiber optics. In its new facilities are housed specialized equipment including logic analyzers, development systems, robots, spectrum analyzers, digital signal processors, programmable component analyzers, power system simulators, and numerous CAD (computer aided design) workstations. The program and equipment remain current through the efforts of an experienced and dedicated faculty. The program was recently listed as the third largest Electrical Engineering Technology associate degree program in the country.

The program is accredited by the Technology Accreditation Commission of the Accrediation Board for Engineering and Technology (TAC/ABET).

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
CST 141	Fortran Programming with Graphic Applications	2	2	2
EET 111	Electrical Construction Laboratory 1	1	3	2
EET 121	Electrical Circuits	4	3	5
EET 100	Introduction to Electrical Engineering Technology	1	0	½
ENG 110	Written Expression I	3	0	3
*MAT 161	Pre-Calculus	4	0	4
		15	8	17½

Spring Semester

EET 112	Electrical Construction Laboratory II	0	3	1
EET 130	Engineering Drawing	0	3	1
EET 150	Electronic Devices	4	3	5
EET 162	Computer Aided Network Analysis	3	0	3
ENG 150	Technical Writing	3	0	3
*MAT 162	Applied Calculus I or	4	0	4
*MAT 181	Calculus I with Analytic Geometry			
		14	9	17

SECOND YEAR
Fall Semester

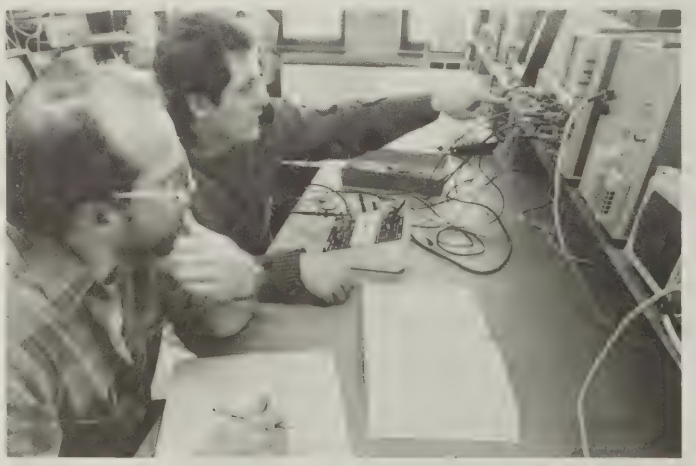
EET 243	Energy Conversions	3	4	5
EET 251	Electronic Circuitry	3	3	4
PHY 141	Physics	3	2	4
EET 267	Digital Electronics and Microprocessors I	3	2	4
		13	10	17

Spring Semester

EET 230	Electronic Design and Fabrication	0	3	1
EET 244	Control Systems	3	3	4
EET 252	Electronic Systems	3	3	4
PHY 144	Physics II-E	3	2	4
	Social Science Elective	6	0	6
		15	11	19

GRADUATION REQUIREMENT: 70½ CREDITS

*Students should consult with the department chairman or his designee to determine the appropriate mathematics courses.



ENGINEERING SCIENCE

ACTING DEPARTMENT CHAIRPERSON, William Beston
ACADEMIC ADVISOR, John Gerty
Applied Technology Building, Room 123
Telephone 771-5114

The Engineering Science curriculum is designed primarily to prepare graduates to continue their studies in the various engineering disciplines at four-year colleges and universities. The strong emphasis on mathematics and physics also allows graduates to transfer to these majors at four-year institutions, with junior-year standing. In addition, there are immediate employment possibilities for qualified graduates who wish to terminate or postpone further educational goals until a more opportune time.

Broome Community College is a member of the New York State Two-Year/Four-Year Engineering College Curriculum Study Committee. The purpose of this organization is to facilitate the transfer to four-year colleges, with junior-year standing, of two-year college graduates from engineering science programs. State University of New York at Binghamton, SUNY at Buffalo and SUNY at Stony Brook, Rensselaer Polytechnic Institute (RPI), Clarkson, Rochester Institute of Technology (RIT), Cornell, Syracuse and Union are among the members of the Study Committee who have agreed to give top priority to applicants with an A.S. degree in Engineering Science and who have been recommended by their department. Some students find it desirable to transfer out of state upon graduation. They, too, in most cases will transfer as full juniors and graduate with a Bachelor of Science in two more years. Broome Community College has an articulation agreement with Wilkes College in Pennsylvania and students have successfully transferred to places like Virginia Polytechnic Institute, Northwestern, Penn State, and the University of New Mexico. Feedback from these and other institutions to which Broome Community College students transfer indicates a high regard for the graduates and the quality of the Engineering Science program at BCC.

For students who wish to complete their education locally, Broome Community College and SUNY Binghamton have a cooperative admissions plan for entering freshmen. Students accepted in this program are guaranteed transfer to SUNY Binghamton as long as they maintain a grade point average of 3.00 at Broome.

Those graduates who prefer to seek immediate employment will find job opportunities as engineering technicians or as assistants to engineers involved in research and development. In addition, employment opportunities also exist which involve the application of mathematics and computer programming.

Students entering Broome Community College who wish to continue studying for their Bachelor's degrees in engineering, applied mathematics, or physics will find the Engineering Science program the most appropriate course of study. As a reasonable guideline for successful achievement in those rigorous programs, a students course work in high school should be above the 80% level in all areas. (See page 7 for specific requirements.)



FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
PED		Physical Education Elective	0	2	1
CHM	145	Chemistry	3	3	4
MAT	181	Engineering Calculus with Analytic Geometry I	4	0	4
EGR	150	Engineering Graphics	1	2	2
PHY	181	Engineering Physics I	3	2	4
		English or Literature Elective	3	0	3
EGR	100	Orientation	2	0	0
			16	9	18

Spring Semester

CHM	146	Chemistry	3	3	4
EGR	151	Applications in Engineering	2	2	3
MAT	182	Engineering Calculus with Analytic Geometry II	4	0	4
PHY	182	Engineering Physics II	3	2	4
		English or Literature Elective	3	0	3
EGR	100	Orientation	2	0	0
			17	7	18

SECOND YEAR
Fall Semester

*EGR	281	Mechanics: Statics	3	0	3
EGR	285	Electrical and Electronic Circuits	3	0	3
EGR	287	Engineering Science Laboratory I	0	3	1
MAT	281	Engineering Calculus with Analytic Geometry III	4	0	4
PHY	281	Engineering Physics III	4	0	4
		Social Science Elective	3	0	3
EGR	200	Orientation	2	0	0
			19	3	18

Spring Semester

*EGR	282	Mechanics: Dynamics	3	0	3
EGR	286	Engineering Analysis	1	0	1
EGR	288	Engineering Science Laboratory II	0	3	1
MAT	282	Differential Equations with Linear Algebra	4	0	4
		**Technical Elective	3	0	3
PED		Physical Education Elective	0	2	1
		Social Science Elective	3	0	3
EGR	200	Orientation	2	0	0
			16	5	16

*Organic Chemistry (CHM 245 and 246) may be substituted by students who are declared Chemical Engineering majors.

**Students who plan to major in Mechanical or Civil Engineering should select EGR 283 Strength of Materials. Students majoring in all other engineering fields should elect EGR 284 Materials Science.

GRADUATION REQUIREMENT: 70 CREDITS

MECHANICAL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, William G. Kelly
Mechanical Building, Room 117
Telephone 771-5023

The continuing thrust for faster and more economical manufacturing methods, more reliable systems and the need for new, clean and consistent sources of energy has generated an increased demand for mechanical engineering technicians with a high degree of technical competence.

The curriculum outline of courses encompasses a blend of mathematics, science, English, social science and technical specialities conceived to generate the necessary background for a variety of entry positions usually align closely with and support mechanical engineering or related functions.

Recent graduates have been employed in areas of design-drafting, product design, quality control, metallurgy, heat-power, purchasing sales, technical writing, system maintenance and computer-aided design. Job opportunities exist both locally and nationally, and starting salaries for 1986 graduates ranged from $20,400 to $15,000 with an average of $17,400.

Mechanical Engineering Technology is a particularly lucrative field for the female. Although few have ventured into the field, those who have are highly successful.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

State University of NY at Binghamton offers a TAC/ABET-accredited Bachelor of Technology program, for which the normal admission requirement is an AAS degree in an engineering technology discipline such as Mechanical Engineering Technology.



FIRST YEAR
Fall Semester

	Hours per Week		Credits per
	Class	Lab	Semester
MET 110 Intro to Technology	1	0	5
*MAT 161 Pre-Calculus	4	0	4
MET 113 Engineering Drawing I	1	2	2
MET 121 Manufacturing ProcessesI	2	2	3
PHY 141 Physics I	3	2	4
ENG 110 Written Expression I	3	0	3
Social Science Elective	3	0	3
	17	6	19½

Spring Semester

CST 122 Scientific Computer Programming - FORTRAN	2	2	3
MET 116 Engineering Drawing II w/CAD	1	2	2
MET 122 Manufacturing Processes II	1	3	2
PHY 142 Physics II	3	2	4
MET 132 Applied Mechanics	4	0	4
ENG 150 Technical Writing	3	0	3
	14	9	18

SECOND YEAR
Fall Semester

EET 183 Electricity	2	3	3
*MAT 162 Applied Calculus I	4	0	4
MET 235 Strength or Materials	2	3	3
MET 243 Fluid Mechanics	2	3	3
MET 263 Engineering Statistics, Quality Control	1	2	2
CAD 211 Computer Graphics	1	2	2
	12	13	17

Spring Semester

EET 186 Electronics	2	3	3
MET 238 Mechanical Design	3	3	4
MET 252 Engineering Materials and Industrial Processes	3	3	4
MET 244 Thermodynamics	2	3	3
Social Science Elective	3	0	3
	13-16	12-14	17

*Or MAT 181-182 Calculus with Analytic Geometry I and II.

GRADUATION REQUIREMENTS: 71½ Credits

PART-TIME STUDENTS

MEETING MANY NEEDS

People often think that higher education is available only for recent high school graduates. Broome Community College tries to reach out and meet the educational needs of ALL the people in Broome County. "Community" is part of the College's name and a large portion of its mission.

Anyone in the community may enroll as a part-time student, and BCC attracts a large number each year. The fall 1986 part-time enrollment was nearly 3,000 men and women, most of them for evening classes. These are mostly people who also work during the day. In recent years, the College has also increased its enrollment of part-time day students, over 700 last fall. The College has a strong commitment to serving the part-time student.

PART-TIME STUDENTS

...are those who take fewer than 12 credits per semester, usually one or two courses. At BCC, part-time students can:

- Enroll in credit or non-credit mini courses.
- Take day or evening courses, or both.
- Attend classes in the fall, spring or summer semester.
- Earn a degree or not, as they see fit. Certificate programs are also available.
- Apply for financial aid-if carrying more than 6 credits.
- Receive academic advice and personal counseling.
- Find other students over 21.
- Borrow books from the College library.
- Carry one, two or three courses.
- Receive Veteran's benefits.
- Transfer credits to BCC earned at another college.

NOTE:

Many firms have a tuition-reimbursement plan that pays all or part of an employee's tuition and costs if his/her courses are job related.

The College conducts a special Information Session for new part-time students at the beginning of the fall and spring semesters to inform prospective students what programs are available, how to register, how to get started at BCC, and to answer their many questions.

CREDIT/DEGREE PROGRAMS FOR EVENING PART-TIME STUDENTS

Broome Community College offers 19 degree programs which can be completed through part-time study. Most of the courses in these programs can be completed in evening or weekend study. On the pages listed, are displays for the following degree programs.

Associate in Applied Science

1. Business (Accounting Emphasis) Page 69
2. Business (General Emphasis in Management and Marketing) Page 69
3. Early Childhood Page 70
4. Criminal Justice Page 70
5. Data Processing Page 63
6. Computer Technology Page 62
7. Fire Protection Technology .. Page 73
8. Individual Studies Page 54

9. Chemical Emphasis Page 71
10. Civil Emphasis Page 71
11. Electrical Emphasis Page 71
12. Mechanical Emphasis Page 72
13. Production Management Page 72
14. Paralegal Assistant Page 73

Associate in Arts

15. Liberal Arts and Sciences Page 74

Associate in Science

16. Computer Science Page 60-62
17. Liberal and General Studies Option Page 74
18. Liberal and General Studies-Mental Health Page 74
19. Individual Studies Page 54

Associate in Occupational Studies

20. Tool and Die Making Page 75

Additionally, the College sponsors several certificate programs. These are detailed on page 16.

ENROLLMENT
FIRST-TIME ENROLLMENT

Those enrolling as part-time students for the first time at Broome Community College should be aware of the following services available to them:

- Information Sessions
- Registration and Advisement
- Financial Aid
- Veterans Benefits
- Counseling Services

THE INFORMATION SESSIONS are conducted prior to each term. At this time, one can learn about the College and its programs, how to register, how to schedule courses, and how to get answers to questions.

REGISTRATION IS REQUIRED. First-time students must register, in person or by mail. They must pay their tuition at the time they register in person, or when billed if registering by mail.

RESIDENCY REQUIREMENTS. See page 12.

CONTINUED ENROLLMENT

Those who are continuing their studies at the College as part-time students should always keep in close touch with their academic advisors and follow the procedure shown on pages 67 and 68 for their program of study, so that they do not overlook any courses they should take.

They are also eligible for the financial aid and veterans benefits of first-time, part-time students, and they have to comply with the same residency requirements. They must also register, either by mail or in person. Tuition must be paid at the time of registration, if in person, or when billed if registering by mail.

ADMISSION
PART-TIME DAY AND EVENING STUDENTS

To be admitted to a degree program at the College all students, including part-time day and evening students, must submit an admission application form to the Admissions Office (Wales, Room 102). Part-time students can be admitted to a degree program at any time.

Although part-time students can take courses without being admitted, it is generally in the student's interest to seek admission early in their studies. This will ensure more accurate and comprehensive advisement. Also, most financial aid programs require formal admission to a degree program.

ADVISEMENT
INFORMATION CENTER

Academic advisement is available for all Broome Community College evening students through the Information Center. Located on the main floor of the library, Room 101, the Center provides information and guidance to evening students requiring assistance. Academic advisors for each department are available during evening hours to accommodate student inquiries. Contact the Information Center to make arrangements for individual advisement sessions. Counseling services are also available Monday through Thursday evenings in the Wales Building, Room 200.

Evening Part-Time Students who are nearing the completion of their certificate or degree program, should consult with one of the academic advisors to ensure that degree requirements are met.

Day Part-Time Students seeking advisement should contact the chairperson of their academic departments. They should also apply to their chairperson when they are ready to receive their associate degrees.

TUITION

Part-time students are those who carry fewer than 12 credit hours. Tuition and fees are listed on page 12.

FINANCIAL AID is available to part-time students who take 6 or more credits. Many companies have tuition reimbursement plans, and employees should familiarize themselves with their companies' policy. The College has a Financial Aid office in the Wales Building, Room 101 to answer questions about this. If one's company is paying. a letter to that effect should be brought to registration.

GRADUATION
EVENING STUDENTS ONLY

All awards for degrees, and Certificates for part-time students at Broome Community College are conferred in May. Evening students who expect to complete course requirements by May must declare their candidacy by filing an *All-Purpose Reminder Form* in the Information Center *prior to February 1* of that year. This will initiate an official review of the records and a formal letter of candidacy. The registrar's Offices will also be notified, and will send out information in April pertaining to the awards ceremonies.

CREDIT FOR PRIOR LEARNING
TRANSFER CREDITS

- Courses completed at another college prior to enrolling at Broome Community College will be considered for transfer credits. The student, however must initiate the request for this consideration.
- An official transcript must be on file for all students - part-time or full-time - prior to transcript review for transfer purposes.

CREDIT FOR NON-ACADEMIC EXPERIENCE

Credit may be given for life experiences or previous employment accomplishments. A number of methods exist for receiving this credit, and details are available from the dean of the division in which one is pursuing a degree (See page ##).

Students may also find it advantageous to request credit by examination for a course in a field in which they have previous experience. They can do this by taking a special examination. If they pass this test, they can receive "Credit by Examination" for the course and will not have to take it, thus saving the cost of tuition and the semester(s) involved. Taking this examination for credit requires payment of a fee for a non-laboratory course. If the course has a laboratory, an additional fee will be charged for the laboratory portion of the exam.

SUMMER SESSION

Each summer Broome Community College offers several terms of summer sessions from 6 to 8 weeks long, in day and evening sections. An announcement of the Summer Schedule and policies is available in April of each year.

WEEKEND COURSES

In addition to a daily class schedule, the College also sponsors courses on Fridays and Saturdays. Schedules are printed each semester.

DISPLAY OF CREDIT PROGRAMS

Following are displays of courses for the programs that the College offers to part-time students. Most of these are given in the evening, although some are day offerings. Students who pursue these programs should meet with their academic advisors or program coordinators to determine the best approach to meeting their individual needs.

The displays of courses in each curriculum are divided into three categories to assist the student in determining which courses to take and in what order.

Category 1 - "Introductory Courses" are entry-level courses in each program. They are frequently prerequisites for courses that must be taken later.

Category 2 - "Additional Courses for Certificate" are those which together with the Introductory courses will satisfy the requirements for the curriculum certificate. The certificate is about the mid-point for the attainment of an associate degree.

Category 3 - "Remaining Courses for Degree" lists the additional courses required for the completion of the associate degree.

Students should always consult with their advisors, as sometimes special course consideration is possible.

ASSOCIATE IN APPLIED SCIENCE - BUSINESS

ACCOUNTING EMPHASIS

DEPARTMENT CHAIRPERSON, Richard Behr, 771-5133
EVENING COORDINATOR, Appointment Pending

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

INTRODUCTORY COURSES			CREDITS
BUS	100	Accounting I	4
BUS	112	Quan. Business Methods	2
BUS	118	Business Law I	3
BUS	141	Marketing	3
ENG	110	Written Expression I	3

Additional Courses for Certificate			
BUS	101	Accounting II	4
BUS	200	Intermediate Accounting I	4
BUS		Business Elective	3-4
CST	110	Introduction to Data Processing	3
		Social Science Elective	3
			32-33

Remaining Courses for Degree			
BUS	201	Intermediate Accounting II	4
BUS	205	Cost Accounting I	4
BUS	210	Managerial Accounting	
		or	
BUS	206	Cost Accounting II	4
ENG	120	Written Expression II	
		or	
ENG	150	Technical Writing	3
		* 2 Mathematics	
		or	6-8
		Science Electives	
SPK	102	Effective Speaking	3
†Business Related Electives (Select 2)			6-8
AAS-Business (Accounting Emphasis)			
Minimum Semester Credits			65-69

*Students who have passed Sequential Math III in high school will take MAT 145 Finite Mathematics. Those who have not passed it will take MAT 117 Elementary Finite Mathematics.

†Business related courses from BUS, CST, MAT, MET or SEC course numbers as approved by the Academic Advisor for Business.

GENERAL EMPHASIS
Management and Marketing

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses			Credits
BUS	100	Accounting I	4
BUS	101	Accounting II	4
BUS	112	Quan. Business Methods	2
BUS	118	Business Law I	3
ENG	110	Written Expression I	3
BUS	141	Marketing	3

Additional Courses for Certificate			
BUS	259	Report Writing	3
Liberal Arts Elective			3
Business Courses (see below)			7
			32

Remaining Courses for Degree			
Business Courses (see below)			8
Business Related Courses (see below)			8
Social Sciences			6
English Elective			3
BUS	115	Business Statistics	3
PHS	111	Physical Science for Today	3
Math or Science Elective			3-4
AAS in Marketing or Management Minimum Semester Credits			66-67

Suggested Management Electives: BUS 210, BUS 211, BUS 224, BUS 245, BUS 246, BUS 249, BUS 252, BUS 255, BUS 256, BUS 257, BUS 258, BUS 261, BUS 262, BUS 270.

Suggested Marketing Electives: BUS 120, BUS 129, BUS 131, BUS 152, BUS 154, BUS 238, BUS 247.

NOTE: A number of choices exist in The Business - General Emphasis Certificate Program. By carefully selecting the proper Business courses, students can generate a concentration in a particular area, such as Sales, Retailing or Management. To identify these courses, students should discuss their interests with their academic advisor.

The courses completed to earn the certificate are acceptable as credits toward an Associate in Applied Science degree in Marketing or Management.

Business students who have taken courses through AIB, LOMA, or other recognized national programs of study and examination should apply to the Academic Advisor for consideration of credit.

A.A.S.-EARLY CHILDHOOD

SUGGESTED SEQUENCE For Part-Time Students: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses			Credits
PSY	110	General Psychology	3
PSY	211	Child Development	3
CDC	100	Introduction to the Education of Young Children	3
ENG	110	Written Expression I	3
CDC	120	Curriculum Development	3

Additional Courses for Certificate			
SOC	110	Introduction to Sociology	3
CDC	245	Social Development of Young Children	3
Child Care Electives (see list below)			9
			30

Remaining Courses for Degree	
English/Literature	3
Humanities Elective (see list below)	3
Math or Science Elective (see list below)	6-8
Child Care Electives (see list below)	3
CDC 170 Practicum I	3
CDC 290 Practicum II	6
Related Approved Electives (see list below)	6
AAS Child Care Minimum Semester Credits	60-62

More Information:
Marilyn Schafer, Program Coordinator or Francis J. Short, Chairman (Phone 771-5029).

CDC Electives:
Students may select 12 hours of courses designated for Child Care, such as CDC 115, CDC 140, CDC 150, CDC 160, CDC 210, CDC 220, CDC 230, CDC 250, LIT 263, THR 117, THR 201

Related Electives:
Students may elect 6 hours from the Related Approved Electives from the Following: PSY 103, PSY, 212, PSY 214, PSY 217, PSY 220, PSY 227, SOC 230, SOC 210, SOC 234; or from other disciplines with permission.

Elective Areas:
Suggested Humanities - select from English, Languages, Fine Arts, Philosophy, Speech

Math or Science - select from Math, Biology, Chemistry, Physics, Physical Science (MAT 113, MAT 114, BIO 131, CHM 120 recommended).

A.A.S.-CRIMINAL JUSTICE

This program is designed for individuals considering employment upon graduation or for those already employed in the Criminal Justice field. Students intending to transfer for advanced degrees are advised to pursue the Criminal Justice option in Liberal Arts (see page 51).

SUGGESTED SEQUENCE For Part-Time Students: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses			Credits
ENG	110	Written Expression I	3
SOC	110	Introduction to Sociology	3
CRJ	105	Corrections	3
CRJ	101	Intro. to Criminal Justice	3

Additional Courses for Certificate			
PSY	110	General Psychology	3
SPK	102	Effective Speaking	3
POS	201	Introduction to American Government or	
POS	204	American State & Local Government	3
Sociology Elective			3
Psychology Elective			3
CRJ	125	Penal Law	3
CRJ	212	Criminal Procedure/ Constitutional Law	3
			33

Remaining Courses for Degree			
ENG	120	Written Expression II	3
Lab Science or Math or Combination			6
Philosophy Elective (PHI 201 or 206 recommended)			3
Free Electives (any field: Social Science recommended)			3
CRJ	115	Juvenile Justice	3
CRJ	215	Police Administration or	
CRJ	230	Criminal Investigation	3
Criminal Justice Elective			6
AAS Criminal Justice Minimum Semester Credits			60

Credit for academy training will be considered after admission to candidacy on the basis of about one credit per 40 or one credit per 50 contact hours, with option to receive transfer credit for other Criminal Justice related programs up to 12 credits total. The requirement will be that the individual must provide documentation of attendance and relevancy of work.

More Information:
Francis J. Short, Chairman, Phone 771-5087
Coordinator, Appointment Pending

ASSOCIATE IN APPLIED SCIENCE - INDUSTRIAL TECHNOLOGY

CHEMICAL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
MAT 139 Algebra	4
CHM 145 Chemistry	4
English Electives (see list below)	3

Additional Courses for Certificate	
CHM 146 Chemistry	4
CHM 291 Organic Chemistry I	3
CHM 292 Organic Chemistry II	3
PHY 141 Physics	4
MAT 140 Trigonometry	4
CST 122 Computer Programming-FORTRAN	3
	32

Remaining Courses for Degree	
PHY 142 Physics	4
CHM 293 Analytical-Instrumental Chemistry I	3
CHM 294 Analytical-Instrumental Chemistry II	3
English Electives (see list below)	3
Social Science Electives (see list below)	6
Approved Technical Science Electives (see list below)	13
AAS Industrial Technology (Chemical Emphasis) Minimum Semester Credits	64

The following may be taken as approved technical/science courses to meet degree requirements: MAT 162, MAT 181, MAT 182, MAT 264, EET 111, EET 112, EET 125, EET 126, MET 261, CST 113, CST 126, CST 150, CST 170, CST 202, CST 205, CST 211, CST 220, CST 222, CST 225, BIO 111, BIO 112.

Suggested English Courses:
ENG 110, ENG 120, ENG 150, SPK 102

Suggested Social Science Courses:
ECO 104, ECO 110, ECO 111, PSY 100, PSY 110, SOC 110, SOS 120, SOS 130.

CIVIL EMPHASIS

In Industrial Technology (Associate in Applied Science Degree)

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
MAT 139 Algebra	4
MAT 140 Trigonometry	4
ENG 110 Written Expression I	3
PHY 141 Physics I	4

Additional Courses for Certificate	
MET 132 Applied Mechanics	4
MET 113 Engineering Drawing I	2
CIV 159 Architectural Drafting	3
CAD 200 Introduction to Computer Graphics	3
CST 122 Computer Programming - FORTRAN	3
CAD 150 Basic CADAM	2
	32

Remaining Courses for Degree	
PHY 142 Physics II	4
MET 235 Strength of Materials	3
ENG 150 Technical Writing	3
Social Science Electives (see list below)	6
CAD 201 Advanced Computer Aided Graphics	3
Approved Technical Electives * (see list below)	13
AAS Industrial Technology (Civil Emphasis) Minimum Semester Credits	64

*The following may be taken as approved technical elective courses to meet the degree requirements: CIV 111, MAT 162 or MAT 181, CIV 160, CIV 216, CIV 217, CIV 224, CIV 226, CIV 228 or CIV 231, CIV 238, CIV 240, CIV 268.

Suggested Social Science Courses: ECO 110, ECO 111, SOC 110, PSY 110, ECO 104, PSY 100.

*Students should note that specialty courses like Surveying, Materials Testing and Steel and Reinforced Concrete Design are generally only offered during the day. Students should carefully review the effect of this scheduling on their academic plans.

ELECTRICAL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses	Credits
MAT 139 Algebra	4
MAT 140 Trigonometry	4
EET 125 Circuits	3
ENG 110 Written Expression I	3

Additional Courses for Certificate	
EET 126 Circuits II	3
EET 255 Electronics I	4
MET 113 Engineering Drawing	2
CST 122 Computer Programming - FORTRAN	3
Social Science Elective (see list below)	3
Approved Technical Electives (see list below)	3
	32

Remaining Courses for Degree	
EET 235 Electrical and Electronics Drawing	2
EET 245 Energy Conversions and Control Systems	4
EET 256 Electronics II	4
EET 257 Electronics III	4
EET 267 Digital Electronics & Microprocessors I	4
PHY 141 & PHY 142 Physics	8
ENG 150 Technical Writing	3
Social Science Elective (see list below)	3
AAS Industrial Technology (Electrical Emphasis) Minimum Semester Credits	64

Approved Technical Electives:
EET 111, EET 112, EET 268, MAT 124, MAT 181, MAT 182, MAT 264, MET 243, MET 132, MET 244, MET 246, MET 253, MET 255, MET 261, MET 280, MET 285, MET 286, CIV 228, CIV 268, CIV 155, CHM 145, CHM 146, CST 115, CST 126, CST 130, CST 150, CST 200, CST 201, CST 202, CST 222, CAD 150, CAD 200, CAD 201, CAD 220, CAD 250.

Suggested Social Science Courses:
ECO 104, ECO 110, ECO 111, PSY 100, PSY 110, SOC 110, SOS 120, SOS 130.

Courses in the fast changing engineering technologies such as Electronics, Computers, Energy Conversions and Control Systems and Machine & Controls, can not be used for degree requirements if they were taken more than 5 years prior to graduation date. One exception to this rule would be the student who has been in the degree program for a number of years and has taken at least one required course every fall and spring semester.

MECHANICAL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses	Credits
MAT 139 Algebra	4
MAT 140 Trigonometry	4
MET 113 Engineering Drawing I	2
English Elective (see list below)	3
Additional Courses for Certificate	
MET 121 Manufacturing Processes I	3
MET 122 Manufacturing Processes II	2
PHY 141 Physics	4
CST 122 Computer Programming - FORTRAN	3
MET 132 Applied Mechanics	4
Approved Technical Electives (see list below)	3
	32
Remaining Courses for Degree	
MET 235 Strength of Materials	3
MET 253 Engineering Materials & Industrial Processes	3
MET 263 Engineering Statistics & Quality Control	2
PHY 142 Physics	4
English Elective (see list below)	3
Social Science Electives (see list below)	6
Approved Technical Electives (see list below)	11
AAS Industrial Technology (Mechanical Emphasis) Minimum Semester Credits	64

The following may be taken as approved technical elective courses to meet degree requirements:
CAD 200, CAD 201, CAM 210, CAD 211, CAD 212, CAD 213, CAD 214, CAD 220, CAD 230, MET 116, MET 125, MET 223, MET 238, MET 243, MET 244, MET 280, MET 285, MET 286, MET 287, EET 111, EET,112, EET 125, EET 126, EET 255, EET 256, EET 257, CIV 159, CIV 160, CHM 145, CHM 146, MAT 181, MAT 182.

Suggested English Course:
ENG 110, ENG 120, ENG 150, SPK 102.

Suggested Social Science Course:
ECO 104, ECO 110, ECO 111, PSY 100, PSY 110, SOC 110, SOC 130.

PRODUCTION MANAGEMENT EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
*MAT 139 Algebra	4
*MAT 140 Trigonometry	4
MET 113 Engineering Drawing I	2
English Elective (see list below)	3
Additional Courses for Certificate	
MET 121 Manufacturing Processes I	3
MET 122 Manufacturing Processes II	2
PHY 141 Physics	4
BUS 255 Industrial Labor Relations	2
MET 280 Management Decisions	2
MET 285 Time, Motion & Wage Study	2
Approved Electives (see list below)	4
	32
Remaining Courses for Degree	**Credits**
CST 122 Computer Programming -FORTRAN (Technical)	3
BUS 252 Supervision of Personnel	2
MET 263 Engineering Statistics & Quality Control	2
MET 286 Production Control	2
MET 287 Plant Layout & Materials Handling	2
PHY 142 Physics	4
English Elective (see list below)	3
Social Science Electives (see list below	6
Approved Electives (see list below)	8
AAS Industrial Technology (Production Management Emphasis) Minimum Semester Credits	64

*Must have a minimum of 4 hours of Mathematics as a requirement for the degree if background makes it unnecessary to take MAT 139 Algebra and MAT 140 Trigonometry.

The following may be taken as approved courses to meet degree requirements:
CST 110, MET 116, MET 125, MET 132, MET 223, MET 235, MET 238, MET 243, MET 244, MET 253, EET 111, EET 112, EET, 125, EET, 126, CIV 159, CIV 160, BUS 118, BUS 154, BUS 243, MAT 181, MAT 182, CAD 200, CAD 201, CAD 211, CAD 212, CAD 213, CAD 214, CAD 220.

Suggested English Courses:
ENG 110, ENG 120, ENG 150, SPK 102.

Suggested Social Science Courses:
ECO 104, ECO 110, ECO 111, ECO 120, PSY 100, PSY 110, SOC 110, SOS 130.



ASSOCIATE IN APPLIED SCIENCE

FIRE PROTECTION TECHNOLOGY

The Fire Protection Technology Program is designed to provide fire fighters and related fire service personnel with specialized training. The curriculum has been developed by a local advisory committee to meet the needs of the area, and specialized courses as well as general education courses constitute the degree program. Specialized courses include Fire Fighter Tactics and Strategy, Arson Investigation, Hydraulics, Hazardous Materials, Fire Prevention, and Building Construction.

This program is open to both paid and volunteer fire fighters of the community, as well as those persons in related firematic areas.

More Information
Francis J. Short, Chairman (Phone 771-5087)
Anthony Winkler, Program Coordinator

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	**Credits**
ENG 110 Written Expression I	3
Fire Protection Courses	9
Additional Courses for Certificate	
SPK 102 Effective Speaking	3
Mathematics or Science Elective (see list below)	3-4
Chemistry (see list at right)	3
Social Sciences (see list right)	3
Fire Protection Courses	6
	30-31
Remaining Courses for Degree	
Fire Protection Courses	6
Social Sciences (see list at right)	3
Health (see list at right)	3
Management (see list at right)	6
Electives (see list at right)	12
AAS Fire Protection Technology Minimum Semester Credits	60-61

Recommended Electives

Chemistry: Suggest CHM 120

Mathematics: Suggest MAT 139 (4 Credits)

Social Sciences: Choose from History, Anthropology, Sociology, Psychology, Political Science, Economics.

Health: Advanced First Aid, Emergency Medical Technician. Programs or equivalent may be submitted for approval. Students may elect BIO 131 Human Biology.

Fire Protection Courses: Select from FRS 101, FRS 103, FRS 105, FRS 107, FRS 108, FRS 200, FRS 201, FRS 205, FRS 250, FRS 299.

Management: Suggest BUS 245, BUS 246, BUS 258, BUS 262, BUS 150.

Electives: Courses with FRS, MAT designators, CHM 121, CHM 290, or other courses with permission.

PARALEGAL ASSISTANT

SUGGESTED SEQUENCE For Part-Time Students: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses	**Credits**
ENG 110 Written Expression I	3
PLA 110 Survey of Paralegalism	3
PSY 110 General Psychology or SOC 110 Introduction to Sociology	3
Additional Courses for Certificate	
ENG 120 Written Expression II	3
PLA 215 Estates, Probates & Trusts	3
PLA 120 Advanced Paralegalism	3
PLA 207 Legal Writing and Research	3
PLA 200 Real Property Law	3
PLA (Paralegal) Elective	6
BUS (Business) Elective	3
	30
Remaining Courses for Degree	
BUS 100 Accounting I	4
PLA (Paralegal) Elective	6
Math/Science Electives	6
SOC (Social Science) Elective	3
Liberal Arts Electives	6
Free Electives	6
AAS Paralegal Assistant Minimum Semester Credits	61

Suggested Math/Science Courses: MAT 124, MAT 145, BIO 131, CHM 120, PHS 111, MAT 113, MAT 114, BIO 120.

Suggested Sequence For Full-Time Paralegal Students (recommendations on electives available from department as part of advisement process).

FIRST YEAR
Fall Semester

	Hours per Week		Credits per
	Class	Lab	Semester
PSY 110 General Psychology	3	0	3
ENG 110 Written Expression I	3	0	3
PLA 110 Survey of Paralegalism	3	0	3
BUS 100 Accounting I	4	0	4
BUS 118 Business Law I	3	0	3
	16	0	16

Spring Semester

ENG 120 Written Expression II	3	0	3
BUS Elective 249, 245 rec'd	3	0	3
PLA 120 Advanced Paralegalism	3	0	3
Arts/Science Elective	3	0	3
PLA 200 Real Property Law	3	0	3
	15	0	15

SECOND YEAR
Fall Semester

Math/Science Elective	3-4	3	3-4
PLA 215 Estates, Probates	3	0	3
Social Science Elective	3	0	3
PLA Elective 225, 220 rec'd	3	0	3
Free Elective	3	0	3
	15-16	3	15-16

Spring Semester

Math/Science Elective	3-4	3	3-4
PLA 207 Writing/Research	3	0	3
Arts/Science Elective	3	0	3
PLA Elective	3	0	3
Free Elective	3	0	3
	15-16	3	15-16

LIBERAL ARTS

ASSOCIATE IN ARTS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses	Credits
Liberal Arts Courses	6
Additional Courses for Certificate	
ENG .110 Written Expression I	3
ENG 120 Written Expression II	3
Approved Humanities	3
Approved Social Sciences	6
Approved Liberal Arts Courses	11
	32
Remaining Courses for Degree	
Remainder of degree requirements (see below)	30
AA Liberal Arts & Sciences Minimum Semester Credits	62

Minimum requirements for AA degree:
English—a minimum of 12 credits, of which 6 shall be in composition and 6 in literature.
History—a minimum of 6 credits in approved courses including HIS 100 The Rise of the West or HIS 115 Modern Global History.
Humanities—a minimum of 6 credits (6 in Philosophy or 6 in a foreign language).
Mathematics—students who have completed fewer than 3 units of secondary school mathematics (through 11th year math) are required to take 2 semesters of college level mathematics. • Students who have completed 3 units of secondary school mathematics (through 11th year math) are required to take one semester of college level mathematics. • Students who have completed more than 3 units of secondary school mathematics (including 11th year math) are not required to take additional math. They may, however, elect an appropriate math course or an elective in another field.
Natural and Physical Sciences—a minimum of 8 credits
Social Sciences—a minimum of 6 credits
Electives—minimum of 16 credits (A maximum of 15 credits may be taken outside the offerings in Liberal Arts & Sciences with the approval of the Dean of Liberal Arts).
The Associate in Arts program is structured to allow the greatest flexibility in course selection and sequence. It is recommended that students begin with the requirement in Written Expression, which is 6 hours of ENG 110 and ENG 120.

More Information:
George Higginbottom, LA Dean (Phone 771-5031)

ASSOCIATE IN SCIENCE

SCIENCE OPTION

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
ENG 110 Written Expression I	3
ENG 120 Written Expression II	3
Additional Courses for Certificate	
*2 Science Elective Sequences	16
HIS 100 Rise of the West	3
#Social Science Elective	3
†Mathematics or Philosophy or Foreign Language (see below)	6-8
	34-36
Remaining Courses for Degree	
*2 Science Elective Sequences	16
2 Literature Electives	6
History Electives	3
#Social Science Elective	3
AS degree in Liberal Arts Minimum Semester Credits	62-64

* "Sequences" in biology, chemistry, physics or physical science must be taken for each of these 2 science requirements. (Recommended: BIO 111, 112; BIO 151, 152; CHM 145, 146; PHY 161, 162; CHM 245, 246.) At least 8 hours must be at the 200 level.

#Courses to be chosen from ANT, ECO, POS, PSY, SOC, SOS designators.

†If the Calculus and Analytic Geometry requirement was met the first year, electives must be Philosophy (6) or Foreign Language (6-8). Higher level math can only be elected by approval of Dean if transfer needs require it.

Students who have not passed Advanced Algebra or its equivalent in high school (usually 3 ½ - 4) high school units) should take Algebra and Trigonometry or Pre-Calculus the first year followed by a year of Calculus with Analytic Geometry in the second year. Only if students have the equivalent of Calculus with Analytic Geometry upon entry can they take the non-math elective.

More Information:
George Higginbottom, LA Dean (Phone 771-5031)

MENTAL HEALTH AND RETARDATION EMPHASIS

SUGGESTED SEQUENCE; Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
ENG 110 Written Expression I	3
PSY 110 General Psychology	3
MAT Mathematics (MAT 124 Statistics recommended)	3
HIS 100 Rise of the West	3
Additional Courses for Certificate	
LAB Science Sequence (BIO 111 or 131 recommended)	4
ENG 120 Written Expression II	3
SOC 110 Introduction to Sociology	3
PHI Elective	3
PSY 214 Abnormal Psychology	3
PSY 217 Counseling and Interviewing	3
	31
Remaining Courses for Degree	
LAB Science Sequence (BIO 112 or 132 recommended)	4
PSY 223 Intelligence and the Mentally Retarded	3
SOS 288 Seminar in Community Social Service Organization	3
PSY 227 Behavior Modification	3
Liberal Arts Elective	3
SOS 290 Social Science Field Work	3
Approved Electives in Mental Health & Retardation Emphasis (see page 54)	12
AS in Liberal Arts (Mental Health & Retardation Emphasis) Minimum Semester Credits	62

More Information:
Charles Croll, Program Coordinator (Phone 771-5021)

TOOL AND DIE MAKING
ASSOCIATE IN OCCUPATIONAL STUDIES (AOS)

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses			Credits
TDA	111	Blueprint Reading	3
MET	113	Engineering Drawing I	2
MET	116	Engineering Drawing II with CAD	2
MAT	139	Algebra	4
MAT	140	Trigonometry	4
Additional Courses for Certificate			
TDA	113	Survey of Basic Industrial Safety and First Aid	2
TDA	114	Benchwork	2
MET	121	Manufacturing Processes I	3
MET	122	Manufacturing Processes II	2
BUS	225	Industrial and Labor Relations	2
TDA	120	Precision Measurement	3
TDA	200	Metallurgy	2
TDA	130	Tool Grinding	2
TDA	140	Production Processes	3
Certificate in Machinist Related Instruction - Minimum Semester Credits			36
Remaining Courses for Degree			
TDA	132	Statics	2
TDA	235	Strength of Materials	3
ENG	150	Technical Writing or	
ENG	110	Written Expressions I	3
BUS	252	Supervision of Personnel	2
ECO	104	Labor Economics and American Industry	3
EET	181	Installation and Maintenance of Electric Motors	2
TDA	261	Introduction to Quality Control and Inspection	3
TDA	248	Hydraulics and Pneumatics	3
TDA	250	Control Systems	3
TDA	230	Tool Design	4
MET	223	Manufacturing Processes III	2
Associate in Occupational Studies (AOS) in Tool and Die Making			66

More Information:
William Kelly, Chairman
Mechanical Engineering
Technology Department
Phone 771-5023

Students desiring less than the full academic experience offered in this program can earn the Machinist Related Instruction Certificate. This consists of completing 36 of the 66 credits listed above. Students are advised to check with the program coordinator before making this decision.

CERTIFICATE PROGRAMS

DIETARY MANAGER
Leads to Certificate

This program is designed for individuals already employed in the food service field, as there is a requirement for supervised work experience by a Registered Dietician. All persons entering the program are responsible for finding a preceptor, and registrations are on a pre-application basis.

			Credits
DIA	101	Nutrition	3
DIA	102	Institution Food Preparation	3
DIA	201	Food Management Systems	3
DIA	202	Personnel Management	3
Apply for Certificate - Dietary Manager			12

More Information:
Judy Komarinetz, Coordinator,
(Phone 771-5343)
Joseph K. Gay (Phone 771-5161)

LIBERAL ARTS & SCIENCES
General Studies Emphasis
Leads to Certificate

	Credits
English	6
Social Sciences & Humanities	18
Approved Electives	8
Liberal Arts Certificate (General Studies Emphasis)	32

The awarding of the certificate does not necessarily mean that the student is a candidate for the Associate in Arts degree. Courses must have approval of the Liberal and General Studies Division to insure that work is appropriate to the Associate in Arts Degree.

More Information:
George Higginbottom, LA Dean,
Phone 771-5031

INTERIOR DESIGN
Leads to Certificate

This is a credit program for individuals interested in a career in interior design or those currently employed in home furnishings or design related fields who would like to obtain greater knowledge and expertise. Those whose interests in design are not job-related are also encouraged to enroll.

Full-time Liberal Arts students are referred to the Design Arts Model for the A.A. degree on page ##.

			Credits
ART	101	History of Western Art	3
ART	105	Introduction to Design	3
INT	101	History of Architecture-Exterior and Interior	3
*INT	110	Interior Design I	4
*INT	111	Interior Design II	4
INT	120	Construction and Workroom Techniques I	2
INT	121	Specification Writing for Interior Designs	2
INT	130	Rendering	2
INT	140	Fabric Analysis	2
CIV	159	Architectural Drafting I	3
BUS	262	Small Business Management	3
		Total	31

*These courses have prerequisites

More Information:
Robert Keller, Program Coordinator,
(Phone 771-5075)

OFFICE TECHNOLOGY
Leads to Certificate
See page 41

This program can be taken as a full-time one-year program or taken as a part-time program either daytime or evening.

CENTER FOR COMMUNITY EDUCATION

Broome Community College has an extensive non-credit community education program of courses, seminars and special events. The program receives about 7,000 registrations each year in its open enrollment programs, serving the community's career development, cultural, and recreational needs.

Career Development

This category consists of courses and seminars designed to update professional skills or introduce participants to new career areas. Recent programs have included such courses as Secretarial Refresher, Refresher Nursing, Microprocessor Applications for Engineers, Industrial Robotics, and management programs.

Corporate Service

The Corporate Service Program at Broome Community College is designed to demonstrate the College's commitment to local economic development. The Program's principle mission is to produce quality education and training packages for area corporations.

Course content, materials and presentations are tailored to fit the unique needs of each client. Classes may be scheduled during the more traditional day or evening frame or around the specific shift schedules of the company. Most employee training programs can take place on the employer's premises, thus minimizing lost employee work time.

Course topics include communication skills, management seminars, safety training, technical programs and personal planning programs.

For additional information on contract education programs, call the Corporate Service Program in the Center for Community Education (771-5056).

Leisure Time Mini Courses

These are short term courses designed to explore a variety of personal interests, hobbies, crafts and recreational areas. Recent programs have included assertiveness, Singles Night, home decoration, personal investing, cooking, photography, and computer courses.

College for Kids

One of the most popular credit-free areas is a program specially designed for kids - from elementary schoolers to high school students. Regular offerings include:

- Computers for Kids
- Drawing for Kids
- Conversational Foreign Language for Kids
- Science for Kids

Generally these short term offerings are scheduled on Saturday mornings throughout the year.

Conferences and Seminars

The College conducts workshops and seminars in a variety of topics throughout the year. These are intended to update job skills and explore new fields of interest. Some of the seminars have been for law-enforcement personnel, women seeking jobs and educational information, volunteer firemen, community agencies, and business and industry employees.

Tour Programs

The College regularly sponsors a variety of charter tours to places such as The Saratoga Performing Arts Center, The Brooklyn Botanical Gardens, The New York City Opera, The Philadelphia Flower Show and Longwood Gardens.

Registration

Community Education Programs are offered continuously throughout the year. Free catalogs list the courses, with their descriptions, times, dates, fees. A form is included in each term's catalog for easy mail-in registration. Registrations are accepted on a first-come, first-served basis.

Course Development

Programs are a joint effort between Broome Community College faculty, community people, area agencies, organizations and business firms. Groups interested in teaching or co-sponsoring a course are encouraged to discuss the possibilities with the College's Center for Community Education. Many programs offered each year come about because someone suggested them, or a group was concerned about a real need in the community. A teaching interest and course proposal form is available for individuals wishing to teach a particular subject. These forms will be mailed upon request. Call 771-5056.

Continuing Education Units

Broome Community College awards Continuing Education Units (CEU's) for selected non-credit courses. These Continuing Education Units are offered in response to those students and employers who desire a measurable and understandable record of non-credit educational activities. Courses which carry CEU's and the number of CEU's granted for each course are identified prior to the start of the course.

Certificate of Participation

Certificates of Participation are given to those participants completing a non-credit course. Many employers fund participation in these courses; information is available in the company's personnel department.

COURSE DESCRIPTIONS

The offering of any course is subject to sufficient enrollment. Courses numbered from 100 to 199 are generally first-year courses, and those numbered in the 200's are usually taken in the second year. The number of credits listed for each course is for a semester, while the number of class hours and laboratory hours is for a week, unless otherwise states. Courses are listed in alphabetical order by department.

ANTHROPOLOGY

ANT 110 Physicial Anthropology and Archaeology **3 Credits**

Introduction to human evolution, variation and prehistory. The Darwinian Revolution, mechanisms of evolution, the fossil record, domestication of plants and animals, the rise of civilization. Prehistory topics may include Americas, Africa, Middle East, Asia.
3 Class Hours

ANT 111 Cultural Anthropology **3 Credits**

Introduction to the study of culture as the behavioral adaptation unique to human societies. Cultural characteristics shared by all humans and major variations found among specific groups. Explanations for rules of social interaction in common activities, the social functions of institutions such as marriage and kinship, the ecological basis of many institutions, language as a culturally defined system of communication, modernization in our own and third world societies.
3 Class Hours

ANT 299 Independent Study **1-3 Credits**

An individual student project in anthropology which is beyond the scope of requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisite: 3 semester hours in Anthropology

ART

ART 101 History of Western Art **3 Credits**

Basic art principles and concepts together with their historical development as shown in representative works of painting, sculpture and architecture. Gallery visits.
3 Class Hours

ART 105 Introduction to Two Dimensional Design **3 Credits**

Introduction to design involves the student with investigation of visual perception and organization. The student is expected to become more fully equipped to understand and work with design concepts through heightened physical and sensory awareness, experimentation with a variety of media and intellectual comprehension of text, lecture and visual examples. Line space, illusion, texture, color and form are explored.
2 Class Hours, 2 Studio Hours

ART 106 Introduction to Three-Dimensional Design **3 Credits**

Developing sensitivity and awareness of our spatial environment is the objective of this course. Aesthetic and functional elements of three dimensional design are explored. Through reading, projects, lectures and field trips, techniques are explored to assist in heightening awareness. This enables the student to understand the functional and aesthetic examples of the three dimensional environment. Emphasis is placed on studio projects.
2 Class Hours, 2 Studio Hours

ART 115 Drawing **3 Credits**

Intensive drawing instruction in charcoal, pencil, pen and ink, pastel and mixed media, life drawing, still-life composition.
6 Studio Hours

ART 116 Painting I **3 Credits**

Beginning painting instruction and practice of oil painting, still-lifes, landscapes.
6 Studio Hours
Prerequisite: ART 115 Drawing or Instructor's permission



ART 130 Pottery **3 Credits**

Study of the basic processes of the design and creation of ceramics, both functional and sculptural. Fundamentals of hand-building, potter's wheel, glazing and firing.
6 Studio Hours

ART 140 Printmaking **3 Credits**

Three equal parts to course — linecut, woodcut, monotype. Explanation, uses, technical demands, potential and limitation of each process. Students to develop images for blocks or plates.
6 Studio Hours

ART 150 Graphic Rendering **3 Credits**

Graphic techniques developed useful for visual presentation of architectural, industrial and aesthetic forms. Studio projects stress creation of the representational image using perspective, color, texture and light. Applicable to advertising and illustration of ideas and products.

ART 215 Painting II **3 Credits**

Continuation of painting instruction and practice done in ART 116 Painting I.
6 Studio Hours
Prerequisite: ART 116 Painting I or instructor's permission

ART 216 Painting III **3 Credits**

Painting from costumed models; advanced composition devices.
6 Studio Hours
Prerequisite: ART 116 Painting II or instructor's permission

Independent Study: Art **1-3 Credits**
ART 296 Printmaking
ART 297 Sculpture
ART 298 Studio Art
ART 299 Art History

An individual student project concerned with advanced work in a specific area of art. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: 3 semester hours of college level work in Art.

BANKING

BNK 150 Customer Service for Bank Personnel — 1 Credit

For customer contact personnel, this practically based course provides an opportunity to improve communication skills as they relate to banking needs. Included are elements of professionalism, handling difficult situations, and interpersonal communication skills.
1 Class Hour

BNK 168 Principles of Banking — 3 Credits

A core course that examines all aspects of banking. A comprehensive introduction to today's diversified bank services. Bank accounting, pricing, profitability, personnel and security functions.
3 Class Hours

BNK 171 Bank Cards — 3 Credits

A thorough overview and update of the bank card industry. History and development of the card, operational aspects, legal and regulatory issues, and implications of the future of the card are discussed in depth.
3 Class Hours

BNK 173 Marketing for Bankers — 3 Credits

A thorough examination of basic marketing principles and practices and their application to the banking industry. Designed for entry level through mid-management level employees.
3 Class Hours

BNK 174 Money & Banking — 3 Credits

Basic economic principles as they relate to banking. This course, designed for bank personnel in customer contact positions, management trainees, and mid-management entry personnel, provides the foundation for further banking study.
3 Class Hours

BNK 175 Consumer Credit Analysis — 3 Credits

Designed for those who understand the basics of consumer lending, this course provides specific training on the many aspects of making a consumer loan. Legal and regulatory issues, credit application and investigation, loan interviewing, documentation, credit decision considerations.
3 Class Hours

BNK 178 Inside Commercial Banks — 3 Credits

Designed for all levels of bank personnel, this course offers an overview of major issues facing banking today. Examined are the current competitive, regulatory, technological, and market related developments affecting commercial banking.
3 Class Hours

BNK 179 Management Fundamentals/Banking — 3 Credits

The art and science of management centered around the basic management function of planning, organizing, leading, and controlling. A student oriented format utilizing case studies and discussion.
3 Class Hours

BNK 185 Corporate Banking — 3 Credits

A pragmatic approach to understanding the lending environment within a bank. The course provides the less experienced commercial lender with a firm grasp of the sequential nature of the lending process. Emphasis is on a practical, technical approach.
3 Class Hours

BNK 187 Bank Letters and Reports — 3 Credits

Methods and skills of business communication as it relates to the bank environment. Examination of the form and format of a variety of bank letters and reports. Practical experience in effective business writing and discussion of common errors.
3 Class Hours

BNK 190 Problem Loans — 3 Credits

Problem loan prevention is stressed by examining common mistakes which cause problem loans. Effectively dealing with problem loans and minimizing losses examined through the use of case studies.
3 Class Hours

BNK 191 Selling Skills for Bankers — 1 Credit

An examination of the skills necessary for customer contact personnel to sell bank services and meet customer needs. Development of specific selling techniques and positive attitude.
1 Class Hour

BNK 192 Bank Management — 3 Credits

For all levels of bank management this course presents a discussion of bank financial statements, an overview of asset liability management and a thorough discussion of deposit functions, lending short-term funds management and capital management.
3 Class Hours

BIOLOGY

BIO 111 General Biology I — 4 Credits

Principles of evolution and ecology as unifying themes in biology. Evolutionary processes and ecological adaptations illustrated by plant and animal diversity. Cellular life processes. Current environmental problems. The laboratory includes physically demanding field trips.
3 Class Hours, 3 Laboratory Hours

BIO 112 General Biology II — 4 Credits

Principles of evolution and ecology as unifying themes in biology. The human animal and its systems. Concepts of animal behavior. Classical genetics, current concepts of gene function and human genetics. Organismal growth and development. Current environmental problems. The laboratory includes physically demanding field trips.
3 Class Hours, 3 Laboratory Hours

BIO 120 Human Sexuality — 3 Credits

Explores information about sexual attitudes, relationships, sexual anatomy, contraception, sexually-transmitted disease, sexual physiology and dysfunction. Course aims to make students feel more comfortable thinking and talking about sex and to prepare them to make rational decisions about this important aspect of their lives.
3 Class Hours

BIO 131 Human Biology I — 4 Credits

Normal structure (gross and microscopic) and function of the skeletal, muscular and nervous systems. Emphasis on physiology in lectures and on anatomy in laboratory, stressing those aspects which have greatest relevance to the student's curriculum.
3 Class Hours, 2 Laboratory Hours

BIO 132 Human Biology II — 4 Credits

A continuation of BIO 131 Human Biology I covering the circulatory, respiratory, digestive, urinary, reproductive and endocrine systems. Emphasis on physiology in lectures and on anatomy in laboratory, stressing those aspects which have greatest relevance to the student's curriculum.
3 Class Hours, 2 Laboratory Hours
Prerequisite: BIO 131 Human Biology I or permission of instructor

BIO 140 Pathophysiology — 3 Credits

Symptoms, syndrome and etiology of pathogenic processes affecting the function and structure of the body.
3 Class Hours
Prerequisite: BIO 132 Human Biology II

BIO 150 Microbiology — 4 Credits

The biology of the common bacteria and related microorganisms. General microbiology including asepsis disinfection, sterilization, cultivation, pathogenicity, resistance, identification.
3 Class Hours, 3 Laboratory Hours

BIO 151 Aquatic Biology — 4 Credits

A study of how light, temperatures and water chemistry influence the plants and animals which live in ponds, lakes, rivers, and estuaries. Current and future ecology. Local, regional and national water related problems including pollution, waste water treatment, ground water contamination, acid rain, water recycling, salt water encroachment, wetland destruction.
3 Class Hours, 2 Laboratory Hours

BIO 160 Microbiology — 3 Credits

Position of microorganisms in the biological world, as well as their cultivation and identification. Asepsis, disinfection and sterilization. Disease transmission and the human elements in defense. For Dental Hygiene Students.
2 Class, 3 Laboratory Hours

BIO 170-199 Special Topics in Biology — 1-2 Credits

Special courses covering particular topics in the biological sciences beyond the scope of the normal course offerings.

BIO 171 Physiology of Exercise — 1 Credit

Designed to develop an understanding and appreciation for the role consistent exercise in maintaining good health. The interrelationship of the muscular, cardiovascular, respiratory and digestive systems and the net effect of training on these systems.
1 Class Hour

BIO 200 Ecology: The Everglades — 4 Credits

A scientific yet sensitive look at one of the world's rare and endangered wilderness areas. Everglades ecology is studied through an extensive wilderness camping experience in Everglades National Park, involving a minimum of 90 hours of classroom and field instruction.
3 Class Hours, 3 Laboratory Hours
Prerequisite: College Biology

BIO 299 Independent Study — 1-3 Credits

An individual student project in a biological field which is beyond the scope of requirements of the courses offered by the department, conducted under the direction of faculty member and approved by the department chairperson. Independent Study is available to students who have a minimum of 3 semester hours of biology.

BUSINESS

BUS 100 Accounting I — 4 Credits

Introduction to accounting principles and procedures necessary to complete the accounting cycle. How computers are used in accounting systems. Emphasis on journals, ledgers and financial statements. Accounting for merchandising transactions, valuation of inventories, and payroll.
4 Class Hours

BUS 101 Accounting II — 4 Credits

Expansion of the fundamental concepts and procedures of accounting. How computers can be applied to accounting systems. Emphasis on internal control, voucher systems and cash transactions, receivables and payables. The acquisition, depreciation and disposal of plant assets. Accounting methods and procedures relating to partnerships and the corporate form of business organizations. Manufacturing with emphasis on the special problems and additional accounting procedures to measure, control and report factory production costs.
4 Class Hours
Prerequisite: BUS 100 Accounting I

BUS 102 Payroll Accounting — 2 Credits

A comprehensive study of Federal and State laws and regulations affecting payrolls and payroll taxes. Practical report preparation and reporting requirements. Proper accounting practices to record payroll taxes.
2 Class Hours

*BUS 104 Introduction to Credit Unions — 3 Credits

Basic introduction to credit unions for those who have no previous knowledge of these financial cooperatives. Nature of credit unions, their history and philosophy, overview of the structure of the credit union movement and affiliated organizations including the National Credit Union Administration (NCUA). Legal basis for the operation of credit unions, their powers and characteristics including share drafts and VISA cards and the traditional services they offer. Roles and functions of credit union management. The developing financial system and basics of insurance and bonding for credit unions.
3 Class Hours

*BUS 105 Credit Union Financial Operations — 3 Credits

The financial management skills needed to operate a credit union, with emphasis upon basic credit union accounting including financial statement analysis and budgeting. Implications of risk management and insurance, along with investment procedures. Marketing and communications. Some bookkeeping experience is recommended as a prerequisite.
3 Class Hours

*BUS 106 Basic Credit Union Operations — 3 Credits

Loan granting, financial counseling, collections. Aspects of credit granting skills, loan policies and current regulations concerning the Equal Credit Opportunity Act (ECOA) and truth-in-lending. Financial counseling skills, including interviewing to techniques and methods of personal finance. Collection systems and delinquency control, emphasizing written and telephone methods of recovering delinquent accounts. Credit unions and the law.
3 Class Hours

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

BUS 110 Introduction to Business — 3 Credits

General background of modern business practices through the study of organization and management, production, human resources, accounting and finance, marketing, and the information needed for control and management decisions in business and society.
3 Class Hours

BUS 112 Quantitative Business Methods — 2 Credits

Application of fundamental arithmetic computations to practical business problems. Emphasis on bank records, percentages, markups, cash and trade discounts, overhead distribution, simple interest and negotiable instruments, depreciation, inventory estimation and valuation.
2 Class Hours
Prerequisite: MAT 090 A Basic Mathematics Review

BUS 115 Business Statistics — 3 Credits

Concepts and mechanics of measures of central tendency, measures of dispersion, probability, sampling theory, estimation, hypothesis testing, and correlation as they relate to general problems in business and economics.
3 Class Hours

*BUS 117 Business and Society — 3 Credits

The role of business in the contemporary world. Increasingly difficult parameter for business despite the growing demands of accountability from government and of social responsibility from consumers. Business values and ethics, the role of business and government, environmental issues and energy policy, business and labor, business and consumer, the influence of multi-national corporations.
3 Class Hours

BUS 118 Business Law I — 3 Credits

Law as an evolutionary and democratic process. Court Structure, administrative law, law-of-contracts, legal principles of agency, employment rights and an introduction to partnership.
3 Class Hours

BUS 120 Business Law II — 3 Credits

The law governing the negotiation or transfer of commercial paper, law of sales, law of personal and real property, bailments, insurance, landlord-tenant relationships and an introduction to corporate law.
3 Class Hours
Prerequisite: BUS 118 Business Law I

*BUS 125 Real Estate Law — 5 Credits

For real estate people preparing for the New York Real Estate Broker's Licensing Examination. Under the supervision of the New York State Department of Licenses. (Credits applicable only to Business program with prior approval from one's academic advisor.)
5 Class Hours

BUS 129 Consumer Behavior — 3 Credits

Emphasizes the development of how people make purchase decisions in the market place. Consumer decision-making, learning, brand loyalty and market segmentation.
3 Class Hours

BUS 130 Retail Management — 3 Credits

Techniques involved in planning, organization, control and operation of diverse retail establishments. Trading area analysis, warehousing, inventory control, customer relations. Case Studies, field trips.
3 Class Hours
Prerequisite: BUS 264 Retailing

BUS 131 Personal Finance — 3 Credits

Guidelines for financial planning regarding long term and short term installments buying i.e. homes, autos, etc., credit, insurances, taxes, savings, budgeting, and investments in real estate, stocks, bonds, IRA's, mutual funds, money market accounts, etc.
3 Class Hours

*BUS 135 Investments — 2 Credits

Application of sound investment principles as they relate to stocks and bonds. Importance of the stock markets, their operation and their place in our society. Current happenings such as over-all market behavior, stock splits, rights and offerings are studied in various companies, making the subject matter current and relevant to financial events of the day. A model portfolio approach with weekly review by class participants.
2 Class Hours

BUS 141 Marketing — 3 Credits

Introductory study of Marketing as an art and a science. Analysis of the basic principles and practices necessary to complete the marketing cycle effectively. Marketing of goods and services, from conception of the original product idea to delivery to the ultimate consumer. Marketing mix, marketing concept, environmental and societal constraints. Lecture, discussion, cases.
3 Class Hours

BUS 152 Selling Fundamentals — 3 Credits

Principles of sales with practical application. Steps leading to a successful sale - prospecting, planning and delivering, dramatizing, handling objections, closing, building good will. Development and presentation of a complete procedure for a product or service. Closed-circuit television used to critique sales presentations.
3 Class Hours

*BUS 154 Purchasing — 3 Credits

Analytical approach to techniques employed in the industrial purchasing phase of marketing. Emphasis on the organization of the purchasing functions as an operational unit of the firm directed toward procurement activities.
3 Class Hours

*BUS 159 Management Institute I — 1 Credit

From the "hands on" point of view, an overview of what it takes to be a manager. Self evaluation, management functions, data management, legal regulations and unions, organizational overview, the people factor in management, and role playing. A team-teaching approach is used when possible.
1 Class Hour

BUS 161 Real Estate Appraisal — 3 Credits

Designed to acquaint participants with the appraisal process of real property. Market approach, income approach and cost approach to value. Activities designed to build appraisal skills through case study, prepare appraisal reports and analyses.
3 Class Hours

*BUS 163 Real Estate for Salespersons — 4 Credits

Designed to meet New York State requirements for licensure as a real estate salesperson. Land use regulation, law of contracts, real estate instruments, real estate mathematics, real estate finance, closing and closing costs, brokerage and the law of agency, valuation and listing procedures, license law and ethics, human rights and fair housing.
4 Class Hours

*BUS 164 Real Estate for Brokers — 4 Credits

Designed to meet New York State requirements for licensure as a real estate broker. Land use regulation, operation of a real estate broker's office, general business law construction, subdivision and development, leases and agreements, liens and easements, taxes and assessments, investment property, property management, condominiums and cooperatives, appraisal, advertising, rent regulations.
4 Class Hours
Prerequisite: BUS 163 Real Estate for Salespersons

*BUS 165 Insurance — 3 Credits

Insurance principles and coverage, type of carriers, organizations, history of insurance, analysis of types of coverage available for business and individuals in the casualty and life fields.
3 Class Hours

*BUS 166 Property and Casualty Insurance — 3 Credits

Common policy provisions relating to property and casualty insurance and surety. Topics include automobile liability and physical damage, workmen's compensation, general liability, New York Insurance Law, rating and multi-line coverage.
3 Class Hours

*BUS 170 Insurance for Agents and Brokers — 7 Credits

Comprehensive survey of insurance. Fire, marine, automobile, owner liability, burglary, boiler, machinery, accident and health, fidelity and surety insurance. Insurance law and duties of the agent.
7 Class Hours

*BUS 176 Real Estate Finance — 3 Credits

Analysis of theories, practices and policies of real estate financing. Mortgage theory and lending practices in addition to alternative means of financing real property in the contemporary market. Case practices to build analytical skills in selecting different financing approaches.
3 Class Hours

*BUS 188 Income Tax I — 2 Credits

Fundamental Federal and New York State income tax rules and regulations for filing personal income tax forms. Gross income inclusions and exclusions, adjustments to income, tax credits, estimated taxes, itemized deductions, penalties and avoidance, amended tax returns.
2 Class Hours

*BUS 189 Income Tax II — 2 Credits

Preparation of supplementary tax forms, such as capital gains, rentals, income averaging, sole proprietorship, self employment taxes, investment credit, corporation tax returns, sub-chapter S corporations, gift and inheritance taxes.
2 Class Hours

BUS 200 Intermediate Accounting I — 4 Credits

An intensive study of accounting theory and procedures. Emphasis on balance sheet accounts and their interrelationships with income statement accounts. The accounting process and correction of errors. Advanced treatment of cash, receivables, inventories.
4 Class Hours
Prerequisite: BUS 101 Accounting II

BUS 201 Intermediate Accounting II — 4 Credits

A more advanced treatment of accounting for fixed assets, intangible assets, current and long-term liabilities. Corporation accounting, funds flow reporting, financial statement analysis.
4 Class Hours
Prerequisite: BUS 200 Intermediate Accounting I

BUS 205 Cost Accounting I — 4 Credits

Nature and purpose of cost accounting. Job order and process costing. Accounting for factory overhead and analysis of variances. Accounting for labor and material.
4 Class Hours
Prerequisite: BUS 101 Accounting II

BUS 206 Cost Accounting II — 4 Credits

Further consideration of cost accounting principles, standard costs and variances. The construction of budgets, profit planning. Flexible budgets. Direct costing. Break even analysis. Accounting for by-products and joint products. Non-Manufacturing costs.
4 Class Hours
Prerequisite: BUS 205 Cost Accounting I

BUS 210 Managerial Accounting — 4 Credits

Accounting for managerial analysis and decision making, providing an analysis of accounting data useful in the planning and control functions of a firm. Study of cost concepts, break-even, differential accounting and responsibility accounting.
4 Class Hours
Prerequisite: BUS 101 Accounting II

BUS 211 Business Applications on the Microcomputer — 3 Credits

Use of business applications software on the IBM PC. Hands-on experience with an integrated system that includes a word processor, spreadsheet, and database used as a problem solving tool. Commercial versions of other applications software are explained and demonstrated.
3 Class Hours
Prerequisite: BUS 100 Accounting I

BUS 224 Business Finance — 3 Credits

Financial principles and procedures of capital management. Analysis of the relationship of finance to micro and macro economic factors such as inflation business cycles, competition, regulation. Emphasis on corporate goals and objectives as a determining factor in the choice of financial management policy. Application of financial ratios, cash budgeting, forecasting, leverage, working capital policy, capital markets, stock and bonds, valuation, and other basic areas of finance.
3 Class Hours
Prerequisite: BUS 100 Accounting I

*BUS 226 Credit and Collections — 3 Credits

An introductory course in Credit and Collections. Examinations of credit management including classification of credit, risk factors, credit department management and collection procedures and correspondence. Designed to prepare students for further study. Co-sponsored by the N.A.C.M.
3 Class Hours

*TAUGHT EVENINGS ONLY AND WHEN FNROLLMENT PERMITS

BUS 227 Advanced Credit Analysis — 3 Credits

An advanced course in credit designed for those students who have completed preliminary credit and collections study. This course is an analysis of advanced credit theories and applications. Includes an examination of financial credit concerns, security devices, credit risk under the U.C.C. and related management functions. Co-Sponsored by the N.A.C.M.
3 Class Hours
Prerequisite: BUS 226 Credit and Collections

BUS 229 Advertising — 4 Credits

Development, economies, functions of advertising. Cost application, media, testing and research methods. Development of advertisements, copy and layout, methods and problems of reproduction. Planning the advertising campaign with step by step developments. Lectures, discussions, demonstrations. BUS 141 Marketing is recommended as preparation for this course.
4 Class Hours

BUS 238 Marketing Research — 3 Credits

Methods of collecting and interpreting marketing information which affect marketing management. Specific applications to problem identification in market development, gauging market potential and implementation of research designs in the market place.
3 Class Hours

BUS 242 Marketing Seminar — 3 Credits

Senior capstone course which integrates various business subjects previously studied. Individual and team approach to analysis of comprehensive marketing and management cases and cooperative consideration of alternative decisions to problem solving.
3 Class Hours
Prerequisite: Non-Marketing majors must have adviser's permission

BUS 245 Management: A Behavioral Approach — 3 Credits

A comprehensive analysis of managerial theories and an integration of selected social sciences to investigate organizational problems related to managerial functions. Impact of the organizational environment and work groups upon human behavior.
3 Class Hours

BUS 246 Principles of Management — 3 Credits

Principles of managerial practices. Planning, organizing, directing, and controlling. Exposes students to proper methods and techniques to achieve employee and job satisfaction. Topics covered include scientific management, behavioral theory, and introduction to management science.
3 Class Hours

BUS 247 Sales Management — 3 Credits

Development of control techniques in the administration of sales forces. Incentive systems, territory planning, development of sales potentials, personnel problems peculiar to this field.
3 Class Hours

BUS 249 Personnel Management — 3 Credits

Principles of managerial practices. The four functions of management-planning, organizing, directing and controlling. Designed to expose the student to the proper methods and techniques to achieve employee and job satisfaction. Processing, developing, maintaining proper utilizing of the labor force. A review of the history and impact of organized labor incorporating economic, political and social pressures which influence employment. Effective interview poise, personal appearance, interviewing techniques, job opportunities and placement services. Correct preparation of a resume and the utilization of references.
3 Class Hours

*BUS 252 Supervision of Personnel — 2 Credits

Concepts and psychology of personnel supervision. Emphasis on the application of management theory through use of case studies and classroom discussions.
2 Class Hours

*BUS 254 Management Institute II — 3 Credits

From the "hands on" point of view, an in-depth study of what it takes to be a manager. Coaching, counseling, performance appraisal, interviewing, conflict resolution, risk, communications, data management, and dealing with stress. A team-teaching approach is used when possible.
3 Class Hours

*BUS 255 Industrial Labor Relations — 2 Credits

Processes of bargaining and contract administration between industrial employers and unions representing employees, as s system of compromising opposing objectives and settling differences. Origins of unions, how they organize and gain recognition and how the labor agreement is negotiated and administered. Interaction among employees, stewards and supervisors. Labor laws. Institutions such as the National Labor Relations Board, mediation, services, arbitration boards and courts. (Completing this course will not give students credit for BUS 256 Labor Relations for Business and Industry).
2 Class Hours

BUS 256 Labor Relations for Business and Industry — 3 Credits

Analysis of labor relations and collective bargaining procedures. Policies of organized labor, employers and government in solving labor-management disputes. Grievance procedure, wage and price policies, arbitration, mediation, negotiations and labor contracts.
3 Class Hours

*BUS 258 Human Relations in Business — 2 Credits

Basic psychological principles applied to the problems of employee selection, training, evaluation, merit rating and advancement. Social interaction and human relations in industry. Motivation concepts and techniques, job satisfaction, morale, conference leadership and employee and management development.
2 Class Hours

BUS 259 Business Report Writing — 3 Credits

Training in logical analysis of business case problems, applied to the preparation of accurate written reports. Methods and skills in formal and informal business writing. Preparation of tables, charts, reference citations, and bibliographies. Improvement of basic business writing skill involved in interoffice memos, letters of adjustment, bids, quotations, public relations.
3 Class Hours

BUS 261 Office Management — 2 Credits

A comprehensive study of modern management principles and practices in office organization, operation and control. Office layout, personnel, office equipment, processing of information and the planning, flow and measurement of
work within the office.
2 Class Hours

BUS 262 Small Business Management — 3 Credits

Designed for those interested in small business as owner-managers. Development of modern management techniques covering forms of organization, site acquisition and location, insurance, marketing, financing, pricing, breakeven, permits, licenses and franchising.
3 Class Hours

BUS 263 Small Business Seminar — 4 Credits

An intensive study of the various facets involved in organizing and operating a small business venture. Researching and evaluating business opportunities, establishing a buying/selling price for the business, small business taxation, analyzing and solving business problems, using information to manage marketing ideas. Heavy emphasis on development of the business plan and preparation of the loan proposal.
4 Class Hours

BUS 264 Retailing — 3 Credits

The history and overview of Retailing as well as the types of retail establishments. The four major areas of retailing: Merchandising, Finance, Operations, and Sales Promotion will be covered in depth. Types of retail outlets, including specialty, department stores, chain stores, supermarkets and discount stores, etc., will be considered.
3 Class Hours

BUS 265 Retail Merchandising — 3 Credits

Principles of effective display: interior, window, point-of-purchase. Analysis of consumer buying habits, market evaluation, trend forecasting. Evaluation of variables of decor, lighting, impulse arrangements. Techniques of advertising and sales promotion. Case studies, field trips.
3 Class Hours
Prerequisite: BUS 264 Retailing

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

BUS 266 Advertising and Promotion for Small Business — 4 Credits

A comprehensive study emphasizing "hands on" approach to small business advertising and promotion. Functions of advertising and promotion, budgeting, media selection, cost consideration, development of copy and layout. Students will use various media, including television, in the preparation of an advertising campaign. Current information on publicly, public relation, merchandising. Store layout and design, sales promotion, dealer programs, and co-op advertising.
4 Class Hours

BUS 270 Management Science — 3 Credits

An introduction to managerial problems relating to the planning and controlling functions, which provide guidelines to making rational decisions. A realistic approach utilizing cases and simulation is taken to expose the student to quantitative as well as subjective analysis to point out the constraints placed upon management.
3 Class Hours
Prerequisite: BUS 115 Business Statistics or MAT 124 Statistics

BUS 295 Accounting Seminar — 4 Credits

In-depth treatment of accounting for payroll taxes followed by actual completion of required state and federal tax forms. Thorough coverage of the Individual Tax Form 1040, schedules A, B, C, D, E, and G, small business taxes schedule SE and investment credit. Corporate Tax form 1120. Accounting concepts and current trends in accounting as reflected through financial statement analysis.
4 Class Hours

BUS 297 Cooperative Work Experience — 1-3 Credits

Cooperative education is available to students in the marketing management, marketing sales and accounting curriculums. On-the-job experience may be obtained in such areas as retailing, banking, fast foods, government services and hotel management, as well as in CPA firms, public accounting offices, industrial, business and government offices where accounting is performed. Cooperative work students will meet with the coordinator one hour each week.
Prerequisite: Full-time student (minimum of 12 credit hours) maintaining an overall grade-point average of 2.5, with 3.00 in Business courses and no F's

BUS 299 Independent Study — 1-4 Credits

The student, under the guidance of a faculty member, undertakes an investigation, study and research in an advanced concept or problem concerning his/her major field of study. Only one independent study course is allowed per semester.
Prerequisite: Approval of Faculty Member and Department Chairperson

CHEMISTRY AND CHEMICAL ENGINEERING TECHNOLOGY

CHM 102 Preparatory Chemistry — 4 Credits

Introductory course in chemistry emphasizing problem-solving techniques related to chemical concepts. Atomic structure, stoichiometry, metric units, chemical bonding, chemical nomenclature, solution chemistry.
4 Class Hours

CHM 120 Fundamental Chemistry — 4 Credits

First course for Fire Protection Technology, Health Sciences and Criminal Justice students. Composition of substances, atomic structure, periodicity, bonding, chemical equations, states of matter, aqueous solutions, chemical equilibria and introduction to organic chemistry.
3 Class Hours, 3 Laboratory Hours

CHM 121 Forsenic Sciences — 4 Credits

Introduction to forsenic chemistry for Criminal Justice students. Examination of firearms, cartridges, explosives, drugs and other types of physical evidence. Emphasis on proper handling of substances found in crime scene investigations. Laboratory techniques include many modern instrumental methods, such as gas chromatography, infrared and mass spectroscopy.
3 Class Hours
Prerequisite: CHM 120 Fundamental Chemistry or permission of department

*CHM 125 Chemistry — 3 Credits

Fundamental concepts of inorganic chemistry. Composition of substances, kinetic and molecular theories, atomic structure and bonding, solutions and colloids, ions in solution and introduction to organic chemistry. For Fire Protection Technology students.
2 Class Hours, 3 Laboratory Hours

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

CHM 133 Survey of Organic Chemistry — 3 Credits

Fundamental treatment of organic chemistry, Nomenclature, properties of selected functional groups, mechanisms, stereochemistry and synthetic methods. Special emphasis on biomolecules such as lipids, carbohydrates, nucleic acids, vitamins and medicinally active compounds.
3 Class Hours
Prerequisite: CHM 145 Chemistry I and CHM 145 Chemistry Laboratory I
Corequisite: CHM 146 Chemistry II and CHM 146 Chemistry Laboratory II and CHM 133L Survey of Organic Chemistry Laboratory

CHM 133L Survey of Organic Chemistry Laboratory — 1 Credit

Emphasis on techniques of separation, identification and purification by classical and instrumental methods such as gas chromatography and spectroscopy, and selected experiments with biomolecules.
4 Laboratory Hours
Prerequisite: CHM 145 Chemistry Laboratory
Corequisite: CHM 133 Survey of Organic Chemistry

CHM 141 General Chemistry — 3 Credits

Introductory treatment of general chemistry for the non-science student emphasizing applications of chemistry in everyday life. Measurements, atoms and bonding, the states of matter, nuclear processes, oxidation and reduction solutions, acids and bases. Applications include energy sources, effects of radiation, the environment, life processes, testing of advertising claims. For Liberal Arts non-science students.
3 Class Hours
Corequisite: CHM 141L General Chemistry Laboratory

CHM 141L General Chemistry Laboratory — 1 Credit

Experiments to introduce chemical laboratory techniques while increasing awareness of the chemical world and to attain some insight into how a chemist attacks a problem. Qualitative and quantitative measurements.
3 Laboratory Hours
Corequisite: CHM 141 General Chemistry

CHM 142 General Chemistry — 3 Credits

Continuation of CHM 141 General Chemistry. Basic concepts of organic and biochemistry. Petroleum, halogenated hydrocarbons, plastics, drugs, consumer products, living systems, food and metabolism. For Liberal Arts non-science students.
3 Class Hours
Prerequisite: CHM 141 General Chemistry
Corequisite: CHM 142L General Chemistry Laboratory

CHM 142L General Chemistry Laboratory — 1 Credit

A continuation of CHM 141L General Chemistry Laboratory emphasizing organic and biochemical experiments. Synthesis, preparation of aspirin, soaps and detergents, dye, plastics. Substantiate classroom lectures: water hardness, preparation of aspirin, soaps and detergents, dyes, plastics, etc.
3 Laboratory Classes
Prerequisite: CHM 141L General Chemistry Laboratory
Corequisite: CHM 142 General Chemistry

CHM 145 Chemistry — 3 Credits

Comprehensive treatment of general chemistry for the science oriented student. Builds on their prior chemistry, with emphasis on the basic laws and theories of chemistry and their derivation from experimental evidence. Presents the qualitative and quantitative aspects of matter's composition and changes and their unifying principles. Includes physical and chemical properties, periodicity of elements, stoichiometry, current atomic and bonding theories, laws and theories of physical states and changes of state, solution chemistry.
3 Class Hours
Prerequisite: Regents Chemistry or CHM 102 Preparatory Chemistry
Corequisite: CHM 145L Chemistry Laboratory

CHM 145L Chemistry laboratory — 1 Credit

Laboratory experiments to emphasize the empirical basis for the principles discussed in lecture and the proper gathering and interpretation of experimental data.
3 Laboratory Hours
Corequisite: CHM 145 Chemistry

CHM 146 Chemistry — 3 Credits

Continuation of CHM 145 Chemistry including thermochemistry, kinetics, equilibrium, equilibrium in aqueous solution, coordinating chemistry and electrochemistry.
3 Class Hours
Prerequisite: CHM 145 Chemistry
Corequisite: CHM 146L Chemistry Laboratory

CHM 146L Chemistry Laboratory — 1 Credit

Continuation of CHM 145L Chemistry Laboratory with emphasis on PH, spectrophotometric and potentiometric instruments and techniques and qualitative analysis.
3 Laboratory Hours
Prerequisite: CHM 145L Chemistry Laboratory
Corequisite: CHM 146 Chemistry

CHM 161 Chemistry — 3 Credits

Basic concepts underlying chemical action emphasizing measurement, basic chemical calculations, atomic structure and the periodic law. Chemical bonding, states of matter, solutions, kinetic/molecular theories, chemical equilibrium and energy changes in chemical reactions.
3 Class Hours
Prerequisite: Regents Chemistry or CHM 102 Preparatory Chemistry
Corequisite: CHM 161L Chemistry Laboratory

CHM 161L Chemistry Laboratory — 1 Credit

Experiments illustrating concepts from lecture. Emphasis on keeping a laboratory notebook and on laboratory skills required for the chemical laboratory. Exercises mostly quantitative in nature.
3 Laboratory Hours, 1 Recitation Hour
Corequisite: CHM 161 Chemistry

CHM 162 Chemistry — 3 Credits

A continuation of CHM 161 Chemistry. Oxidation-reduction and electrochemistry, acids, bases and salts. Solubility product principle, acid/base equilibrium, thermodynamcis. Principles of qualitative analysis.
3 Class Hours
Prerequisite: CHM 161 Chemistry and CHM 161L Chemistry Laboratory
Corequisite: CHM 162L Chemistry

CHM 162L Chemistry Laboratory — 1 Credit

Experiments illustrating concepts from lecture, including seven weeks of semi-mirco qualitative analysis. Emphasis on laboratory skills and notebookkeeping.
3 Laboratory Hours, 1 Recitation Hour
Prerequisite: CHM 161 Chemistry and CHM 161L Chemistry Laboratory
Corequisite: CHM 162 Chemistry

CHM 220 Introduction to Instrumental Analysis — 2 Credits

An introduction to the theory and laboratory instruction in electrochemical, nuclear, optical and chromatographic methods of analytical chemistry. Laboratory techniques include potentiometry, conductimetry, coulometry, polarography, liquid scintillation counting, gamma spectrometry, ultraviolet-visible, infrared, atomic absorption spectrophotometry, gas, ion, high performance liquid chromatography, and gas chromatography, mass spectrometry. For Medical Laboratory Technology students.
1 Class Hour, 3 Laboratory Hours
Prerequisite: CHM 146 Chemistry

CHM 245 Organic Chemistry — 3 Credits

A fundamental treatment of organic chemistry. Organic nomenclature, chemical properties of selected functional groups, mechanisms, stereochemistry and synthetic methods. For Liberal Arts science majors and Engineering Science students with departmental approval.
3 Class Hours
Prerequisite: CHM 146 Chemistry
Corequisite: CHM 245L Organic Chemistry Laboratory

CHM 245L Organic Chemistry Laboratory — 2 Credits

Basic techniques of separation and purification such as recrystallization, distillation, extraction, chromatography, modern instrumental techniques. Introduction to modern organic synthesis.
4 Laboratory Hours
Corequisite: CHM 245 Organic Chemistry

CHM 246 Organic Chemistry — 3 Credits

A continuation of CHM 245 Organic Chemistry including spectroscopy and introduction to molecules of biological importance.
3 Class Hours
Prerequisite: CHM 245 Organic Chemistry
Corequisite: CHM 246L Organic Chemistry

CHM 246L Organic Chemistry Laboratory — 2 Credits

A continuation of CHM 245L Organic Chemistry Laboratory including an introduction to complex multi-step synthesis and qualitative organic analysis by classical and modern instrumental techniques.
4 Laboratory Hours
Prerequisite: CHM 245 Organic Chemistry and CHM 245L Organic Chemistry Laboratory
Corequisite: CHM 246 Organic Chemistry

CHM 251 Chemical Engineering Technology Seminar — ½ Credit

Topics in the field of Chemical Engineering Technology will be presented by guest lecturers from industry and academics. For Chemical Engineering Technology students.
1 Class Hour

CHM 261 Organic Chemistry — 3 Credits

A systematic study of the families of organic chemistry, including concepts of bonding, equilibria, reaction, kinetics, energy profiles, isomerism and synthesis. Families viewed with emphasis on nomenclature, structural features, preparations, reaction products and uses.
3 Class Hours
Prerequisite: CHM 162 Chemistry
Corequisite: CHM 261L Organic Chemistry Laboratory

CHM 261L Organic Chemistry Laboratory — 2 Credits

Experiments include separation techniques using instrumentation (infra-red spectroscopy, gas chromatography) and synthesis.
6 Laboratory Hours
Corequisite: CHM 261 Organic Chemistry

CHM 262 Organic Chemistry — 3 Credits

Continuation of CHM 261 Organic Chemistry. Mass spectroscopy and nuclear magnetic resonance. Special topics including heterocyclic compounds, polymers, biomolecules.
3 Class Hours
Prerequisite: CHM 261 Organic Chemistry
Corequisite: CHM 262L Organic Chemistry Laboratory

CHM 262L Organic Chemistry Laboratory — 2 Credits

Emphasis on qualitative organic chemistry. Identification of unknowns.
6 Laboratory Hours
Prerequisite: CHM 261L Organic Chemistry Laboratory
Corequisite: CHM 262 Organic Chemistry

CHM 265 Instrumental Methods of Chemical Analysis — 3 Credits

Principles and techniques of modern quantitative analysis including treatment of analytical data, sampling, solution adjustment, chelatometry, redoximetry, aqueous and non-aqueous acid-base titrations, electrophoresis and isoelectric focusing, ion-exchange, ion chromatography, conductimetry, coulometry electrogravimetry, polarography, amperometry, potentiometry, radioisotope methodology. For Chemical Engineering Technology and Liberal Arts "chemical model" students.
3 Class Hours
Prerequisite: 1 full year of college general chemistry and MAT 162 Applied Calculus I and PHY 142 Physics
Corequisite: CHM 265L Instrumental Methods of Chemical Analysis Laboratory

CHM 265L Instrumental Methods of Chemical Analysis Laboratory — 2 Credits

Application of chelometric, redox, precipitimetric, aqueous and non-aqueous acid-base methods for chemical analysis or organic and inorganic compounds. Operation of polarographs, conductimeters, potentiometers, coulometers, and electroanalyzers for applications in electrochemical methods of analysis. Operation of a microprocessor controlled liquid scintillation counter, gamma spectrometer, and Geiger-Muller counter for applications in radioisotope methodology. Statistical evaluation of data obtained by the various analytical methods. For Chemical Engineering Technology and Liberal Arts "chemical model" students.
6 Laboratory Hours
Prerequisite: 1 full year of college general chemistry and MAT 162 Applied Calculus I and PHY 142 Physics
Corequisite: CHM 265 Instrumental Methods of Chemical Analysis

CHM 266 Instrumental Methods of Chemical Analysis — 3 Credits

Principles and techniques of modern instrumental methods of chemical analysis, including ultraviolet, visible, infrared, nuclear magnetic resonance, atomic absorption, emission and mass spectroscopy. Ion, gas and liquid-liquid chromatography. Chemical and scanning electrical microscopy and differential thermal analysis. For Chemical Engineering Technology students.
3 Class Hours
Prerequisite: CHM 265 Instrumental Methods of Chemical Analysis
Corequisite: CHM 266L Instrumental Methods of Chemical Analysis Laboratory

CHM 266L Instrumental Methods of Chemical Analysis Laboratory — 2 Credits

Analysis by optical, separations, thermal techniques, trace methods applied to contemporary, industrial and environmental problems.
6 Laboratory Hours
Prerequisite: CHM 265 Instrumental Methods of Chemical Analysis
Corequisite: CHM 266 Instrumental Methods of Chemical Analysis

CHM 271 Chemical Processes — 3 Credits

Material and energy balances along with applied and physical principles as they apply to chemical engineering. Emphasis on chemical problem solving.
3 Class Hours
Prerequisite: CHM 162 Chemistry, MAT 162 Applied Calculus I and PHY 142 Physics
Corequisite: CHM 271L Chemical Processes Laboratory

CHM 271L Chemical Processes Laboratory — 2 Credits

Application of lecture topics to industrial situations. Emphasis on written and oral reports.
4 Laboratory Hours
Corequisite: CHM 271 Chemical Processes

CHM 272 Chemical Processes — 3 Credits

Staged operations dealing with phase equilibrium. Graphical, analytical and computer methods are used to solve unit operations problems.
3 Class Hours
Prerequisite: CHM 271 Chemical Processes
Corequisite: CHM 272L Chemical Processes

CHM 272L Chemical Processes Laboratory — 3 Credits

Measurement of phase equilibrium. Graphical, analytical and computer methods are used to solve unit operations problems.
4 Laboratory Hours
Corequisite: CHM 272 Chemical Processes

CHM 290 Forensic Toxicology — 3 Credits

Application of the principles of forensic toxicology and the related forensic sciences within the scope of medical-legal investigation. Drug and poison analysis, examination of physical evidence and death investigation. Laboratory sessions will provide basic knowledge of forensic analysis utilizing microscopy, gas chromatography, thin layer chromatography and spectroscopy.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CHM 120 Fundamental Chemistry or a semester of General Chemistry or permission of instructor

*CHM 291 Organic Chemistry I — 3 Credits
*CHM 292 Organic Chemistry II — 3 Credits

Nomenclature, properties of selected functional groups, mechanisms, stereochemistry, synthetic methods and spectroscopy. The laboratory stresses basic techniques of reactions, separations and isolations by classical methods as well as modern instrumental techniques.
2 Class Hours, 3 Laboratory Hours each
Prerequisites: CHM 146 Chemistry for CHM 291
CHM 291 Organic Chemistry I for CHM 292

*CHM 293 Analytical-Instrumental Chemistry I — 3 Credits

Classical analytical chemistry - sampling, statistics, gravimetric and volumetric analysis. Introduction to electrochemistry.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CHM 146 Chewmistry

*CHM 294 Analytical-Instrumental Chemistry II — 3 Credits

Continuation of CHM 293 Analytic-Instrumental Chemistry I. Additional electrochemistry and electrochemical techniques. Emphasis on spectroscopic and chromatographic methods. Visible, infrared and nuclear magnetic resonance spectroscopy. Gas, liquid, column and thin layer chromatography.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CHM 293 Analytical-Instrumental Chemistry I

CHM 299 Independent Study — 1-4 Credits

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a work assignment.
Prerequisite: Departmental approval

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

CIVIL ENGINEERING TECHNOLOGY

CIV 110 Introduction to Civil Engineering Technology — ½ Credit

Introduction to the College and its policies, placement, transfer and study skills. Reasonable skill in the hand-held calculator to be developed. Outside speakers representing the various sectors of employment.
1 Class Hour

CIV 111 Surveying I — 4 Credits

Fundamentals of plane surveying. Angle and distance measurement, leveling, stadia, note keeping, operation and care of instruments, traversing and topographic surveys. Extensive laboratory application of theory.
2 Class Hours, 6 Laboratory Hours
Corequisite: MAT 161 Precalculus

CIV 112 Surveying II — 2 Credits

A continuation of CIV 111 Surveying I. Error probability, topographic surveying and mapping, boundary surveys and deed searching, field astronomy, planetable, control surveys, state plane coordinates, use of EDM instruments. Select topics in Photogrammetry.
1 Class Hour, 3 Laboratory Hours
Prerequisite: CIV 111 Surveying I

CIV 115 Engineering Drawing — 2 Credits

Fundamentals of Engineering Drawing includes care and use of instruments, line-work, lettering geometric constructions, orthographic projection, sections, auxiliary views, pictorial drawings, and dimensioning. Fundamentals of Descriptive Geometry including visibility, true length, true shape, parallelism, perpendicularity, intersections, and developments.
1 Class Hour, 3 Laboratory Hours

CIV 119 Architectural Drafting — 2 Credits

Fundamentals of architectural drafting including floor plans, elevations, sections, details, schedules, plot plans, plumbing layouts, electrical layouts. Introduction to solar design. Emphasis on residential drawings.
4 Laboratory Hours
Prerequisite: CIV 115 Engineering Drawing

CIV 124 Mechanics (Statics) — 3 Credits

Static force systems and equilibrium. Free body diagrams, trusses, graphic statics, spatial force systems, friction, centroids, moments of inertia.
3 Class Hours
Prerequisite: PHY 141 Physics

CIV 155 Surveying — 3 Credits

Plane surveying including distance measurement, note keeping, compass surveying, leveling, angle measurement, care and use of instruments, stadia, traversing, coordinates, area computation, mapping and records.
2 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 139 Algebra and MAT 140 Trigonometry or equivalent

*CIV 156 Route Surveying — 4 Credits

Horizontal and vertical curves, spirals, sight distances and earthwork. Introduction to computer applications. Laboratory includes problem sessions using the college's computer to solve coordinate geometric problems.
3 Class Hours, 2 Laboratory Hours
Prerequisite: CIV 155 Surveying

*CIV 159 Architectural Drafting I — 3 Credits

Development of working drawing for use in residential type construction. Plot plans, floor plan, elevations, details, mechanical and electrical layouts. Lectures to include construction materials, specifications and methods.
2 Class Hours, 2 Laboratory Hours

*CIV 160 Architectural Drafting II — 3 Credits

A continuation of CIV 159 Architectural Drafting I. Development of working drawings for two-story and split-level residences.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 159 Architectural Drafting I

*CIV 161 Architectural Drafting III — 3 Credits

Development of a set of working drawings for a small two-story commercial building including floor plans, elevations, sections, details, mechanical and electrical layouts, window and door schedules. Term project.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 160 Architectural Drafting II

CIV 215 Strength of Materials — 4 Credits

Concepts of stress and strain. Behavior of materials due to axial force, torsion and moment. Stresses in beams and columns, shear and moment, deflections, determinate and indeterminate members, composite members, combined stresses.
4 Class Hours
Prerequisite: CIV 124 Mechanics (Statics)

CIV 216 Route Surveying — 3 Credits

Route surveying: Simple and compound curves, vertical curves, spirals and earthwork. Selected topics in route design, and curve problems in highway design. Computer applications (COGO). Formerly CIV 212.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 111 Surveying I

CIV 217 Materials Testing — 3 Credits

Composition, properties and testing of construction materials. Major emphasis on plain concrete. Aggregates, cements, admixtures, design and proportioning of concrete mixes, curing and inspection. Bituminous materials and ferrous metals, load and deformation measurements, behavior of materials under load, strain gages.
2 Class Hours, 3 Laboratory Hours
Corequisite: CIV 215 Strength of Materials

CIV 224 Reinforced Concrete Design — 3 Credits

Fundamental theory and principles for design of reinforced concrete by the strength method. Design, analysis and detailing to rectangular beams. T-beams, beams reinforced for compression, columns and footings. Theory of prestressed concrete. An integrated design and detailing project.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 215 Strength of Materials

CIV 226 Structural Steel Design — 3 Credits

Fundamental theory and principles necessary for design of simple steel structures. Design, investigation and detailing of beams, columns, tension and compression members and their connections. Composite beams. An integrated design and detailing project.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 215 Strength of Materials

*CIV 228 Estimating and Construction Planning — 3 Credits

A systematic approach to estimating building project costs combined with a study of construction management and the critical path method of scheduling.
2 Class Hours, 2 Laboratory Hours

CIV 231 Estimating and Construction Planning — 3 Credits

A systematic approach to estimating building project costs. Term project building cost estimate. Use of spreadsheet as an estimating tool.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CIV 119 Architectural Drafting

CIV 236 Construction Management — 3 Credits

Principles of construction management, specification writing, with emphasis on planning, building, scheduling and controlling a project. Use of critical path program.
3 Class Hours



CIV 237 Hydraulics — 3 Credits

Hydraulics including properties of fluids, hydrostatics, fluid motion in or through orifices, nozzles, pipes, weirs, open channels, pipe branches and networks.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 124 Mechanics (Statics)

CIV 238 Architectural Design and Building Materials — 3 Credits

Design and detailing of commercial building including site considerations, space requirements, layout planning, building materials, construction methods, construction details, working drawings. Emphasis on individual creativity. Semester project.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 119 Architectural Drafting

CIV 240 Soil Mechanics — 3 Credits

Soil origin and nature, soil density, test borings, gradation, compaction, soil water, frost in soil, classification, permeability, shear strength, stress distribution, bearing capacity, piles. The laboratory covers ASTM and AASHO specifications used in classifying and predicting behavior of soils.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 215 Strength of Materials

*CIV 268 Engineering Economics — 2 Credits

Use of compound interest in financing and in determining engineering cost comparisons. Introduction to depreciation methods. Illustrative cases and problems (personal and engineering) including New York State Professional Engineering Examination problems.
2 Class Hours
Prerequisite: MAT 139 Algebra or equivalent

CIV 299 Independent Study — 1-4 Credits

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent course allowed per semester. Consideration may be given to a project involving a work assignment.
Prerequisite: Departmental approval

COMMUNICATIONS

COM 100 Introduction to Mass Media — 3 Credits

Overview of the components of American mass media including history, structure, economics, regulation, verbal and visual imagery, and dynamics. Radio, television, newspapers, magazines, film, and the closely related advertising and public relations field are surveyed.

COM 110 Introduction to Photography — 3 Credits

Basics of camera design and operation, plus the fundamentals of photographic visualization and composition: line, form, color light, shadow. Darkroom procedures, film processing, basic printmaking, selective printing techniques. (Students must have their own 35mm single lens reflex camera and should expect to pay for their own photographic materials - about $60.)
2 Class Hours, 2 Laboratory Hours

COM 112 Intermediate Photography — 3 Credits

Systems of precise exposure and processing control. Creative darkroom techniques including selective toning, hand coloring, and high contrast variation. Portfolio development. Introduction to color; color processes and printing from color slides. (Students must have their own 35mm single lens reflex cameras, and should expect to pay for their own photographic materials - about $60.)
2 Class Hours, 2 Laboratory Hours
Prerequisite: COM 110 or permission of instructor

COM 115 Writing for the Media — 3 Credits

An introductory study of the elements necessary for media writing. Students will be exposed to writing formats commonly used in media production. Writing formats covered may include news reporting. TV/radio advertising, drama, documentaries and sports. Students will have the opportunity to utilize their writing skills in many of the aforementioned areas.
3 Class Hours

COM/THR 121 Makeup for TV and Film-(TBA) — 1 Credit

Use of prosthetics and cosmetics. Techniques of executing age, character and stylistic effects. Students to provide pertinent materials.

COM 125 Introduction to Audio Theory and Production — 3 Credits

Introduction to the basic aspects of technical and production techniques of audio systems, including microphone, speaker, amplifier, recording and playback theory, placement and operations. Special emphasis will be given to the use of audio equipment including taping, editing, and duplicating.
2 Class Hours, 2 Laboratory Hours

COM 130 Introduction to Video Theory and Production — 3 Credits

Introduction to the basic aspects of technical and production techniques of television. Emphasis will be placed on theory and use of television equipment, staging, lighting, television graphics, scripting basic engineering, distribution systems and studio personnel. In addition to the student produced and directed assignments, members of the class will participate in production crews.
2 Class Hours, 2 Laboratory Hours

COM 135 Selection, Evaluation and Utilization of Media — 3 Credits

Introductory course to help the student choose the most practical mode of media for communicating on an idea or objective. Hardware and software will be demonstrated, discussed and made available for "hands on" utilization by students. Evaluation of audio-visual/LRC media to guide the student in effective utilization of instructional media materials and equipment. Students will prepare some media materials for the course.
3 Class Hours

COM/THR 140 Presentation for Radio/TV — 3 Credits

Presentation as on-air personality. Development of visual and vocal techniques relating to presentation of news, interviews, commercials and announcements.
3 Class Hours

COM 200 Image Theory for Film Photography and Television — 3 Credits

Study of important theories of image production and effectiveness. Survey of several significant photographers, filmmakers, and television artists and their work. Emphasis on the formal elements of the still and moving image and their psychological and aesthetic effects.
3 Class Hours

COM 203 Beginning Filmmaking I — 3 Credits

Introduction to the craft of filmmaking. A hands-on approach to basic principles of photography, camera operation, lighting and editing used in the making of motion pictures. Introduction to sound recording. Students must pay their own film and laboratory fees.
2 Class Hours, 2 Laboratory Hours

COM 204 Filmmaking II — 3 Credits

Advanced work in filmmaking. The student will do hands-on work in both single system and double system sound. He will study scriptwriting, working with actors, and the business side of filmmaking. Each student will be expected to complete a brief film using double system sound as a final project. Students must pay for their own film and laboratory fees.
2 Class Hours, 2 Laboratory Hours

COM 210 Advanced Video Production — 3 Credits

This course stresses the application of basic video production theory and techniques as they apply to a variety of productions such as Advertisements, News, Drama, Sports or other such events. Students will be responsible for ideas, scripting, design, production, editing and evaluation of final projects. Both studio and portable systems will be available for student use.
2 Class Hours, 2 Studio Hours
Prerequisite: COM 130 Introduction to Video Theory and Production

COM 230 Technical Foundations for the Media Technician — 3 Credits

A practical study of cables, connectors and interconnections as they relate to AV equipment and Audio/Television Production Control equipment. Also included is a basic study of D.C. electricity, an Intro to A.C. fundamentals, filtering circuitry, power supply circuitry and associated electrical measurement equipment.

COM 250 Internship (TBA) — 2-3 Credits

Placement in a communications related job. Involves in addition to job requirements, directed reading, meetings with the intern supervisor, and written assignments. Internships are not paid positions.

COM/THR 266 Acting for TV, Film and Commercials — 3 Credits

Proficiency in performing before the camera. Character analysis, quick-study, re-takes, voice-overs, studio projection, facial nuances, and sublety of mannerism.
2 Class Hours, 2 Studio Hours

COM 299 Independent Study — 1-3 Credits

An individual student project concerned with advanced work in a special area of communication. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.(Requires application and approval.)
Prerequisite: 3 semester hours of college level work in communications

COMMUNITY INTERNSHIP

CTP 275 Community Internship — 3 Credits

A non-paid, supervised internship related to a student's planned major or career concentration. Arranged contractually with supervising faculty member. Involves, in addition to work at the placement site, periodic conferences with campus mentor, prescribed reading and written assignments. Students must have an overall "B" or 3.0 average to qualify. Requires personal interviews with campus mentor and internsite supervisor(s).

COMPUTER GRAPHICS

DEPARTMENT CHAIRPERSON, Gary E. Ostrander
Applied Technology Building, Room 003
Telephone 771-5337

The Computer Graphics Department services various College programs by providing required and elective courses in Computer Graphics. Courses are available to Broome Community College students days and evenings, and special contract courses are offered to employees of local industries in the College CAD Center and at industrial sites. Various Technical and Engineering programs at Broome Community College have offered courses including three-dimensional modeling since the spring of 1982.

The College CAD Center currently has Industrial CAD Systems from Computervision and IBM. Consideration is now being given to various Micro-CAD (CAD on personal computers) packages due to the tremendous growth in this field.

Broome Community College has been designated by the New York State Education Department as a Resource and Development Center for Drafting Occupations and Graphics, Printing, and Visual Communications Occupations for New York State. The function is to serve as a clearing house between industry and education for matters relating to these fields.

CAD 150 Basic CADAM — 2 Credits

Introduction to the operation of CADAM System. Data base hierarchy. Construction of basic drawing elements. Display management. Manipulation of drawing elements. Creation of simple mechanical Layouts and detail drawings in two dimensions. Methods for efficient use of the CADAM System. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MAT 161 Precalculus or equivalent background in engineering drawing.

CAD 200 Introduction to Computer Graphics — 3 Credits

Introduction to the College's Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) System. Command structure. Implementation of commands to generate basic two-dimensional drawings. Introduction to three-dimensional construction. Text and execute files. Selected topics.
2 Class Hours, 4 Laboratory Hours
Prerequisite:MAT 161 Precalculus or equivalent/and an acceptable background in engineering drawing

CAD 201 Advanced Computer Graphics — 3 Credits

Mechanical Design in three-dimensions. View and model space commands. Work in isometric and auxiliary views. Descriptive geometry problem solving. Surfaces. Presentation of 3D parts and assemblies on a drawing format. Execute programs, file manipulation, MACRO language.
2 Class Hours, 4 Laboratory Hours
Prerequisite: CAD 200 Introduction to Computer Graphics

CAD 210 Computer Aided Numerical Control I — 3 Credits

Numerical control programming and applications using computer graphics. Tool paths are developed, verified, edited and regenerated, from part drawings: point to point, contouring pocket and profile milling and lathe applications. Sheet metal flat pattern development and punching. Inputs are in "APT" Automatic Programmed Tool. Post processing. 2½ axis machining.
2 Class Hours, 4 Laboratory Hours
Prerequisite: CAD 200 Introduction to Computer Graphics. Background in Numerical Control. Permission of instructor.

CAD 211 Basic Mechanical Design — 2 Credits

Introduction to the College's CADD 4X Systems. Command structure. Use of commands necessary to draw and manipulate two-dimensional models. Introduction to three-dimensional concept. Text files. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: CAD 200 Instruction to Computer Graphics. Background in Numerical Control. Permission instructor.

CAD 212 Detailing — 2 Credits

Use of the College's CADDS 4X Systems to produce engineering production drawings from a three-dimensional model database. Use of DRAW mode to enhance the appearance of model geometry to meet standard drafting conventions. Dimensions and Tolerancing to industry standards. Create drawing formats. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: CAD 211 Basic Mechanical Design

CAD 213 Intermediate Mechanical Design — 2 Credits

Use of the College's CADDS 4X Systems with commands necessary to draw and manipulate three-dimensional models. Multiple views of models including 6 standard views, auxiliary views, and axonametric views. Definitions and intersection of basic surfaces including surface graphics. Figures. Applications to assemblies. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: CAD 211 Basic Mechanical Design

CAD 214 Advanced Mechanical Design — 2 Credits

Use of the College's CADDS 4 X Systems in advanced applications. Mass properties of individual and composite volumes. Advanced Surface Design - commands and design approach. Applications to Descriptive Geometry - intersessions, developments, B-Splines. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: CAD 213 Intermediate Mechanical Design

CAD 220 Printed Circuits, Electrical Schematics and Wiring Diagrams — 3 Credits

Fundamentals of computer aided design as used in the field of electricity and electronics. Laboratory work includes layout of schematic and ladder diagrams using previously constructed library parts. Design of printed circuit boards using automatic board routing. Use of extract definition files to obtain a bill of materials.
2 Class Hours, 4 Laboratory Hours
Prerequisite: Permission of instructor and CAD 200 Introduction to Computer Graphics, EET 150 Electronics or equivalent industrial experience.

CAD 221 Basic CAD For Electrical — 3 Credits

Fundamentals of computer aided design applied to electrical field. Graphics commands for construction of three-dimensional parts. Drawing enhancement using detailing techniques. Library part construction, schematic diagrams, and printed circuit board layout. Use of text files, autoroute, data extract, and design checking files.
Prerequisite: Acceptable background in mechanical drawing, EET 150 Electronic Devices, equivalent industrial experience, or permission of the instructor.

CAD 230 CAD System Operation — 3 Credit

System architecture - physical components. Hands-on experience. Building a system, day-to-day operating procedures, system failures and recovering procedures. Disc file management, magnetic tape back-ups. CADDS entry options, fonts, menus, keyfiles, batch processor, task interrupts, command editor. System commands relating to file manipulation, information textfiles, system status, accounting log and textfile manipulation utilities. MACRO languages.
2 Class Hours, 4 Laboratory Hours
Prerequisite: CAD 201 Advanced Computer Aided Graphics or permission of instructor.

CAD 299 Independent Study — 1-4 Credits

The student undertakes an independent project in his/her specialty under the guidance of a faculty member which is beyond the scope of courses currently offered by the department. Only one independent study course allowed per semester. Consideration may be given to a project involving a work assignment.
Prerequisite: CAD 201 Advanced Computer Aided Graphics, CAD 230 CAD System Operation and Permission of Computer Graphics Chairperson

COMPUTER STUDIES

CST 101 Orientation — 0 Credits

An opportunity for students to receive information about advisement and registration, transfer, interview techniques, resume writing, career opportunities, new trends in computing. Listening to speakers from Broome Community College, from other colleges, and from business and industry, viewing films and video tapes and watching demonstrations. May be used as a common testing hour for multi-section courses. All full-time Computer Studies students are required to register for this course every semester.

CST 105 Understanding Computers — 3 Credits

How computers work. Step-by-step problem solving. Historical perspective and future trends. Social implications. The value of information to society. Applications. Laboratory work which includes simple programming and use of programs for information processing, is done on the IBM Personal Computer. For students with no previous computing experience.
2 Classes, 2 Laboratory Hours
Prerequisite ENG 110 Written Expression I

CST 108 Programming in Basic — 3 Credits

Introduction to computer programming using BASIC on the IBM-PC. No previous programming experience is necessary. Topics include input-output statements, IF-THEN statement, FOR-NEXT loops, WHILE loops, subscribed variables, string manipulation. Modular development and self documentation will be emphasized. MAY NOT BE TAKEN FOR DEGREE CREDIT BY COMPUTER STUDIES STUDENTS.
2 Class Hours, 2 Laboratory Hours
Prerequisite: MAT 090A Elementary Algebra or equivalent

CST 110 Introduction to Data Processing — 3 Credits

Historical development and current influences exerted on society by the computer. Basic computer concepts including data entry, hardware and software components that comprise a computer system. Introduction to the computer and the programming language BASIC with hands-on experience.
3 Class Hours

CST 114 Introduction to Computing — 3 Credits

Problem solving using modular structured design. Computer hardware: input and output devices, memory, CPU, classification of computers. Information representation: binary, octal, hexidecimal arithmetic. Historical development and social implications of computers: applications, privacy, security, ethics. Lab work on both mainframe and microcomputers. Word processing will be introduced and used to write papers. Other lab work includes operating system use, file management and spreadsheet software, comparison of interactive and compiled languages. REQUIRED FOR COMPUTER STUDIES STUDENTS.
2 Class Hours, 2 Laboratory Hours
Prerequisite: MAT 139 Algebra or equivalent

CST 115 Introduction to Pascal — 3 Credits

Introduction to the fundamentals of structured programming using Pascal. Topics include input-output statements, data types, loop structures, procedures and functions, records. Lab assignments emphasize modular design and self documentation using examples from business rather than from mathematics. Programming will be done on the IBM-PC using Turbo Pascal. MAY NOT BE TAKEN FOR DEGREE CREDIT BY COMPUTER STUDIES STUDENTS. (See CST 132)
2 Class Hours, 2 Laboratory Hours
Prerequisite: MAT 090B Elementary Algebra or equivalent and an introduction to computing course

CST 116 RPG II and RPG III — 3 Credits

Fundamentals of RPG (Report Program Generation), a language used by many small business installations. Topics include specification sheets, internal logic, control breaks, branching, tables and table look-up. Lab assignments will be done in RPG II. Additional topics from RPG III will be discussed. **2 Class Hours**
2 Laboratory Hours
Prerequisite: CST 105 Understanding Computers or CST 114 Introduction to Computing.

CST 118 Introduction to COBOL — 3 Credits

Introduction to the fundamentals of structured programming using COBOL. Business oriented lab problems will be assigned. Topics include structured design, use of files, report generation, control breaks, interactive techniques. MAY NOT BE TAKEN FOR DEGREE CREDIT BY COMPUTER STUDIES STUDENTS. (See CST 128)
2 Class Hours, 2 Laboratory Hours
Prerequisite: MAT 090B Elementary Algebra or equivalent and an introduction to computing course

CST 122 Scientific Computer Programming-FORTRAN — 3 Credits

Introduction to problem solving techniques using FORTRAN including development of an algorithm, flow charting, program writing, debugging, storage, and execution, input and output, loop techniques, array manipulation, file control and control of on-line equipment, structured programming, terminal and batch operations. Material to be covered taken from student's area of study. For engineering technology students.
2 Class Hours, 2 Laboratory Hours
Prerequisite: Working knowledge of algebra and trigonometry

CST 123 Introduction to Ada — 3 Credits

Introduction to problem solving using the programming language Ada. All required steps to develop and execute an Ada program will be covered. Data types including arrays and records, control statements and loop structures, block structuring and modular programming using functions and procedures, packages, exception handling. MAY NOT BE TAKEN FOR DEGREE CREDIT BY COMPUTER STUDIES STUDENTS. (See CST 182)
2 Class Hours, 2 Laboratory Hours
Prerequisite: MAT 140 Trigonometry or equivalent and an introduction to programming.

CST 124 Computer Programming for Engineering — 3 Credits

FORTRAN programming with applications in engineering, statistics and mathematics. Topics include syntax, looping, data representation, branching, functions and subroutines, multidimensional arrays. Simulation of engineering processes and graphical displays using CAD/CAM system.
2 Class Hours, 2 Laboratory Hours
Prerequisite: MAT 140 Trigonometry and EGR 150 Engineering Graphics

CST 126 Assembly Programming-BAL — 3 Credits

System/360 and 370 overview and hexidecimal arithmetic, relative addressing machine and assembly code, instruction formats, type formats and boundaries, input/output techniques and data sets, decimal operations, logical instructions, branching and looping, subroutines, fixed point operations.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 132 Structured Programming in Pascal or CST 128 Structured Programming in COBOL

CST 128 Structured Programming in COBOL — 4 Credits

Problem solving using the structured programming techniques of COBOL. Top down design is emphasized. Programming steps include program definition, structure charts, coding, debugging, testing and validation, documentation and program maintenance. Topics include file handling, looping, program modularization, control breaks, tables, and interactive programming. Lab assignments reflect common business applications. FOR COMPUTER STUDIES STUDENTS. (Others see CST 118)
3 Class Hours, 2 Laboratory Hours
Prerequisite or corequisite: CST 114 Introduction to Computing

CST 130 PL/I — 3 Credits

Introduction to PL/I, a general purpose structured programming language capable of handling both scientific and business problems. Data types and attributes, declaration, assignment, control, iteration, arrays and structures, string techniques, procedures and blocks, functions, input/output, formatting.
2 Class Hours, 2 Laboratory Hours
Prerequisite: One programming language or permission of instructor.

CST 132 Structured Programming in Pascal — 4 Credits

Problem solving using the structured programming techniques of Pascal, Top down design and modular structure will be emphasized. Programming steps include program definition, structure charts, coding, debugging, testing and validation, documentation, program maintenance. Topics covered include loop structures, procedures, functions, scalar and ordinal types, arrays, records, and text files. Lab assignments will require modular structured programming. FOR COMPUTER STUDIES STUDENTS. (Others see CST 115 Introduction to Pascal)
3 Class Hours, 2 Laboratory Hours
Prerequisite or corequisite: CST 114 Introduction to Computing

CST 140 Computers for Chemists — 3 Credits

Introduction to the application of both microcomputers and large time-shared computers to problems in Chemistry. The principles of structured programming are examined, using BASIC and an introduction to PASCAL, including algoritm development, flow charting, debugging and execution. High level languages operating systems and hardware. Introduction to the use of microcomputers to control laboratory equipment and to collect and process real-time data. For Chemical Engineering Technology students.
2 Class Hours, 2 Laboratory Hours
Corequisite: MAT 162 Applied Calculus I or MAT 181 Calculus I with Analytic Geometry I and CHM 146 Chemistry or CHM 162 Chemistry.



CST 141 FORTRAN Programming with Graphic Applications — 3 Credits

Introduction to problem solving techniques using FORTRAN. Development of steps to solve a problem (algorithm), use of text editor, terminal operation, file storage and retrieval, program writing, debugging, execution and program documentation. Components include input/output, formatting, loop techniques, array manipulation, use of complex numbers, subroutines, sequential access data files. Graphic applications include figure creation, scaling, plots of X-Y data, equations and polar plots. For Electrical Engineering Technology students.
2 Class Hours, 2 Laboratory Hours
Corequisite: MAT 161 Precalculus

CST 150 APL — 3 Credits

An introduction to the powerful array handling language APL. Operations on scalars, vectors, matrices, arrays of any size or shape, primitive and user defined functions. Editing and workspace management. Business and scientific applications.
2 Class Hours, 2 Laboratory Hours
Prerequisite: Two 3-credit programming language courses, and MAT 139 Algebra or equivalent

CST 158 Spreadsheets with Financial Applications — 3 Credits

An introduction to commonly encountered financial calculations which can be done efficiently with a spreadsheet package. Topics include interest problems, amortization, capital depreciation, break-even analysis, and forecasting. Labs will be done on the IBM-PC using Lotus 1-2-3.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 114 Introduction to Computing

CST 170 Digital Logic — 3 Credits

Comprehensive coverage of basic gates. Boolean algebra, Karnaugh mapping and Quine McCluskey technique for circuit simplification. Adders, subtractors, multiplexers, code converters, asynchronous and synchronous counters presented in detail as basic computer building blocks. Analog-digital and digital-analog interfacing. Lab exercises utilize TTL and CMOS chips.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 114 Introduction to Computing
Prerequisite or Corequisite: CST 132 Structured Programming in Pascal.

CST 180 FORTRAN, A Second Course — 3 Credits

For students with previous programming experience in another programming language. Problem solving using structured FORTRAN. Complete program development including definition, FORTRAN coding, debugging and testing. Full documentation required for each program including a structure chart and a program logic manual. Topics include: loop and branch structures, arrays, subprograms, data types, formatted and list directed input/output, data structures, sequential and random access files, buffers and unformatted input/output.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 132 Structured Programming in Pascal or permission of instructor

CST 182 Ada, A Second Course — 3 Credits

For students with previous experience in structured programming. A review of structured programming fundamentals: type declarations, procedures and functions, files. Generic subprograms and packages, private and access types, tasking and parallel computation, external interfaces and exception handling, low-level input-output. Complete program development will be required.
2 Class Hours, 2 Laboratory Hours
Prerequisites: MAT 161 Precalculus or equivalent and one of the following: CST 132 Structured Programming in Pascal, CST 128 Structured Programming in Cobol, CST 123 Introduction to Ada, CST 115 Introduction to Pascal, permission of the instructor

CST 200 Systems Analysis I — 3 Credits

A first course dealing with the principles of systems analysis and problem solving, concentrating on investigation and analysis of systems and their resulting design. The importance of standards, procedures, documentation and design tools. A team case study used to develop a design for a new system.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 128 Structured Programming in COBOL

CST 201 Systems Analysis II — 3 Credits

Continuation of the principles of systems analysis with a concentration on systems development, implementation and evaluation. A team case study approach used to develop a system based on previously completed analysis and design. Programs written using COBOL and structured programming techniques.
2 Class Hours, 2 Laboratory Hours
Prerequisite: "C" grade or better in both CST 218 Advanced COBOL, and CST 200 Systems Analysis I

CST 202 Advanced Pascal with Data Structures — 3 Credits

Static and dynamic data structures. Choice of proper structure to organize data. Topics include arrays, records, files, linked lists, trees, stacks, queues, directed graphs. Lab work will introduce applications of the topics and will be done on the IBM-PC in Turbo Pascal. Structured modular programming is required.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 132 Structured Programming in Pascal with a Grade "C" or better

CST 211 Microcomputer Applications — 3 Credits

Using application packages on the IBM-PC. Topics include operating system commands, word processing, spreadsheet analysis, database management. Students will write a major paper about the use of microcomputers in a selected business or industry and present an oral summary to the class for discussion.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 132 Structured Programming in Pascal

OFFERED FOR THE LAST TIME IN 1987

CST 213 Databases — 3 Credit

Concepts of information structures. Linked-list, hierarchical, network, and relational database models.Application development with database systems. Database administration, multi-user systems, data security. Labs will use both mainframe and microcomputer database systems.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 128 Structured Programming in COBOL or CST 132 Structured Programming in Pascal

CST 214 Computer Operations: Procedures and Management — 3 Credits

A broad based course introducing the concepts of operations and scheduling in the computer center environment. An overview of some of the concepts of operating systems. Operating systems such as UNIX, PC-DOS, and VMS will be reviewed. This course will NOT involve writing operating system programs. Topics include Job Control Language, command files, computer center operations, scheduling, high-level programming tools. Labs will provide hands-on experience with operations and systems.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 128 Structured Programming in COBOL or CST 132 Structured Programming in Pascal

CST 218 Advanced COBOL — 3 Credits

A second course in the use of COBOL language as a means of implementing computerized solutions to data processing problems. Batch interactive processing, various file access techniques, use of advanced language statements and of various utilities to the COBOL programmer.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 128 Structured Programming in COBOL with C grade or better

CST 220 Microprocessors and Assembly Language Programming — 3 Credits

An introduction to microcomputer and coprocessor architecture using the Intel family from 8088 through 80386 and 8087 through 80387. Programming modes, branching, flags, stacks, subroutines, interrupts, procedures and interfacing. Extensive assembly language programming to reinforce these concepts. Programming concepts include fundamental arithmetic operations, multiple precision using the coprocessor, string handling, logic operations.
2 Class Hours, 2 Laboratory Hours
Prerequisite: One structured Programming Language
Corequisite or prerequisite: CST 170 Digital Logic

CST 222 Topics in Computer Systems — 3 Credits

Topics in this course acquaint students with current techniques and equipment. They may include microprocessors programming and interfacing: scheduling, queueing, time-sharing, filing manipulations; microcomputer programming and graphics; data communications systems.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 132 Structured Programming in Pascal or instructor's permission

CST 225 Introduction to Small Systems — 3 Credits

Introduction to the concepts and implementation of small computer systems. Hardware and software techniques, Keyboards, display terminals, printers, graphics, magnetic storage, disk drives, disk operating systems, telecommunications techniques, and networking. Extensive use of the IBM-PC in the laboratory will reinforce classroom concepts.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 220 Microprocessors and Assembly Language Programming with a "C" grade or better and CST 132 Structured Programming in Pascal

CST 297 Cooperative Work Experience — 1-3 Credits

Cooperative education in computing may be available. On-the-job experience may be obtained by working with businesses, industries and offices whose operations require the use of computers. To be eligible a student must maintain a cumulative grade point average of 2.5 with a 3.0 average in CST courses and have no F grades.

CST 299 Independent Study — 1-3 Credits

The student undertakes an independent project, under the guidance of a faculty member, which is beyond the scope of courses currently offered by the department. Only one independent study project allowed per semester.

CRIMINAL JUSTICE

Criminal Justice (CRJ) courses may not be used to satisfy the Social Science requirement.

The Criminal Justice program was developed with great flexibility in course selection and can be taken on a part-time basis by those individuals currently employed in the field. Those students who wish to pursue it on a full-time basis should contact the Program Coordinator of Criminal Justice. Very close planning and advisement will be necessary to pursue this program to its completion in two years.

CRJ 101 Introduction to Criminal Justice — 3 Credits

Overview of the major components of the criminal justice system-law enforcement, prosecution, trial courts and corrections. A systems approach is utilized with an emphasis on the structure, functions and independence of these and other criminal justice system components.
3 Class Hours

CRJ 115 Juvenile Justice System — 3 Credits

Overview of the juvenile system, including the history, process, status and philosophy of the juvenile court. Law enforcement handling of juveniles, various theories of delinquency causation, correctional programs and alternative methods of dealing with juvenile offenders. (Formerly CRJ 250)
3 Class Hours

THE FOLLOWING CRIMINAL JUSTICE COURSES ARE TAUGHT IN THE EVENING ONLY

*CRJ 105 Introduction to Corrections — 3 Credits

Overview of the corrections components of the criminal justice system, tracing the history of corrections in the United States. Relationships and interdependencies of corrections with the court and law enforcement components of the criminal justice system and a discussion of the theoretical basis for the four major types of correctional models. (Formerly CRJ 240)
3 Class Hours

*CRJ 125 Penal Law — 3 Credits

Essential elements of the various crimes under the New York State Penal Law. The concepts of culpability and criminal defenses recognized under the New York State Penal Law as they relate to murder, rape, robbery, burglary, arson, assault, drug offenses, disorderly conduct and harassment.
3 Class Hours

*CRJ 130 Introduction to Security — 3 Credits

Organization and management of the security function in industry, business, government and institutions. The protection of personnel, facilities and other assets, as well as administrative, legal and technical problems of loss prevention and control. (Formerly CRJ 260)
3 Class Hours

*CRJ 212 Criminal Procedure and Constitutional Law — 3 Credits

The right to counsel, search and seizure, confessions, lineups, electronic surveillance, probation and parole.
3 Class Hours
Prerequisite: CRJ 101 Introduction to Criminal Justice

*CRJ 215 Police Administration — 3 Credits

Fundamentals or organization, supervision and over-all management of police and civilian personnel. Designed to supply a background for the student in dealing with the complexities involved in the management aspect of various police agencies. (Formerly CRJ 110)
3 Class Hours
Prerequisite: CRJ 101 Introduction to Criminal Justice

*CRJ 225 Security Administration — 3 Credits

Administration of public and private security efforts: problems in protection program development and evaluation, functions of various levels or personnel, company/organizational relations, documents and personnel access control, detection systems, devices, and equipment, emergency and disaster planning, new directions in the field of security.
3 Class Hours
Prerequisite: CRJ 130 Introduction to Security or permission of the instructor/ department chairperson.

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

*CRJ 230 Criminal Investigation — 3 Credits

Basic principles of investigation as they relate to the collection, preservation, identification and examination of physical evidence. Techniques for locating and interviewing witnesses and for interrogating suspects.
3 Class Hours
Prerequisite: CRJ 101 Introduction to Criminal Justice and CRJ 125 Penal Law

*CRJ 225 Special Topics in Criminal Justice — 1-3 Credits

The specific area to be covered will be based upon identified needs and interests of criminal justice students. This course also provides a forum for professional individuals in the criminal justice field with a particular expertise to share their knowledge and skills with students.
1-3 Class Hours
Prerequisite: CRJ 101 Introduction to Criminal Justice and 2 other CRJ courses.

CRJ 260 Organized Crime — 3 Credits

Role of legal system in organized crime control, preventative methods, political influences; white collar crime, methods of intelligence gathering; relationships of organized crime to community social structure.
3 Class Hours
Prerequisite: CRJ 101 Introduction to Criminal Justice department permission

CRJ 299 Independent Study — 1-3 Credits

An individual student project concerned with advanced level work beyond the scope of breadth of regular courses. A specific area or topic is investigated under the direction of a faculty member. Must be approved by department chairperson.
Prerequisite: CRJ 101 Introduction to Criminal Justice and 6 credits in CRJ courses

DENTAL HYGIENE

DEN 101 Dental Hygiene I — 2 Credits

Contemporary practice of dental hygiene and factors affecting such practice. Basic techniques of preparation for the dental hygiene appointment, patient evaluation and patient treatment.
2 Class Hours
Corequisite: DEN 101l Dental Hygiene Laboratory

DEN 101L Dental Hygiene Laboratory — 2 Credits

Practical application in an actual clinical setting of the principles described in lecture mode of the course.
6 Laboratory Hours
Corequisite: DEN 101 Dental Hygiene I

DEN 102 Dental Hygiene II — 4 Credits

Continuation of DEN 101 Dental Hygiene I. Clinical experience in the basic techniques of dental hygiene care including patient appraisal, treatment planning, instrumentation and patient oral health instruction. Theory in ethics, jurisprudence, professional organizations, emergency medical and dental procedures and care of patients with special medical problems and oral physiotherapy and oral health instruction.
4 Class Hours
Prerequisites: DEN 101 Dental Hygiene I, and DEN 103 Oral Anatomy and Physiology, BIO 131 Human Biology I or permission of the department.
Corequisite: DEN 102L Dental Hygiene II Clinic

DEN 102L Dental Hygiene Clinic — 2 Credits

Clinical dental hygiene practice.
8 Laboratory Hours
Corequisite: DEN 102 Dental Hygiene II

DEN 103 Oral Anatomy and Physiology — 4 Credits

Normal structure and function of the oral cavity (microscopic and gross). Laboratory work provides experience with traditional approaches to the study of oral anatomy and physiology.
2 Class Hours, 4 Laboratory Hours

DEN 106 Clinical Dental Radiography — 1 Credit

Radiation physics and biology; understanding of radiation health, safety and protection; radiograph film quality, intraoral dental radiographic techniques, film processing and mounting, interpretation of radiographic factors and recognition of anatomical landmarks.
1 Class Hour
Prerequisite: DEN 101 Dental Hygiene I, DEN 103 Oral Anatomy and Physiology, BIO 131 Human Biology I or permission of the instructor
Corequisite: DEN 106L Clinical Dental Radiography Laboratory

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

DEN 106L Clinical Dental Radiography Laboratory — 1 Credit

Practical application on manikins and patients of principles described in lecture mode.
2 Laboratory Hours
Corequisite: DEN 106 Clinical Dental Radiography

DEN 110 Dental Materials — 3 Credits

Composition, chemical and physical properties and use of materials used in dental laboratory and operatory. Laboratory sessions will provide experience in performing com mon dental laboratory procedures and background for clinical application of expanded functions.
2 Class Hours, 2 Laboratory Hours
Prerequisite: DEN 103 Oral Anatomy and Physiology or permission of the instructor

DEN 201 Dental Hygiene III — 2 Credits

Continuation of DEN 102 Dental Hygiene II. Integration of theory with clinical experience in various oral hygiene preventative procedures. Emphasis on planning and execution of the total patient treatment.
2 Class Hours
Prerequisite: DEN 102 Dental Hygiene II, DEN 106 Clinical Dental Radiography, DEN 110 Dental Materials, BIO 106 Microbiology, BIO 131 Human Biology I and BIO 32 Human Biology II.
Corequisite: DEN 201L Dental Hygiene III Clinic

DEN 201L Dental Hygiene III Clinic — 3 Credits

Clinical dental hygiene practice.
12 Laboratory Hours
Corequisite: DEN 201 Dental Hygiene III

DEN 202 Dental Hygiene IV — 2 Credits

Continuation of DEN 201 Dental Hygiene III. Comprehensive clinical experience in all phases of dental hygiene practice. Introduction to computer use in dental office management.
2 Class Hours
Prerequisite: DEN 201 Dental Hygiene III, DEN 204 General and Oral Pathology, DEN 205 Periodontology and DEN 209 Nutrition
Corequisite: DEN 202L Dental Hygiene IV Clinic

DEN 202 L Dental Hygiene IV Clinic — 3 Credits

Clinical dental hygiene practice.
12 Laboratory Hours
Corequisite: DEN 202 Dental Hygiene IV

DEN 204 General and Oral Pathology — 3 Credits

Broad picture of the disease process through the study of common general diseases, their cause, results and treatment. Emphasis on the principles of inflammation, healing and repair, oral disease, their causes, recognition and treatment.
3 Class Hours
Prerequisite: DEN 102 Dental Hygiene II, BIO 132 Human Biology and BIO 160 Microbiology or permission of the instructor

DEN 205 Periodontology — 2 Credits

Overall study of the pathology of the supporting structures surrounding the teeth. Special emphasis on recognition and treatment of the periodontal patient within the scope of the dental hygienist.
2 Class Hours
Prerequisite: DEN 102 Dental Hygiene II, DEN 106 Clinical Dental Radiography, BIO 132 Human Biology II and BIO 160 Mircrobiology or permission of the instructor.

DEN 206 Dental Pharmacology — 2 Credits

Pharmacology as it affects the clinical practice of dental hygiene and dentistry. Drugs commonly used in dentistry and correct methods for their use. Emphasis on pharmacological aspects of anesthesia.
2 Class Hours
Prerequisite: DEN 201 Dental Hygiene III or permission of the instructor

DEN 209 Nutrition — 3 Credits

Basic nutrition principles, including metabolism, functions, sources, and conditions resulting from excessive or inadequate intake of each nutrient. Study of diet planning, dietary guidelines, weight control, nutrition care throughout the life cycle., and current nutrition topics. Special emphasis on the relation of nutrition to the oral cavity. Interviewing, nutrition counseling, and its practice in the dental office.
3 Class Hours
Prerequisite: DEN 102 Dental Hygiene II or permission of the instructor

DEN 213 Public Health — 3 Credits

Principles of public health and fundamentals of assessing, planning, implementing and evaluating of public health care with emphasis on community dental health. Laboratory experience in assessing, planning, implementing and evaluating care for a particular target population.
2 Class Hours, 2 Laboratory Hours
Prerequisite: DEN 102 Dental Hygiene II

DEN 214 Dental Specialties — 2 Credits

Overview of dental specialities with emphasis on those specialities not covered in other courses in the Dental Hygiene curriculum-endodontics, orthodontics, pedodontics.
2 Class Hours
Prerequisite: DEN 201 Dental Hygiene III or permission of the instructor

DEN 298 Independent Study - Fall — 1-3 Credits

Advanced studies in Dental Hygiene conducted under the guidance of a Dental Hygiene instructor.
Prerequisite: DEN 101, 102 Dental Hygiene I and II and permission of Department Chairperson

DEN 299 Independent Study - Spring — 1-3 Credits

Advanced studies in Dental Hygiene conducted under the guidance of a Dental Hygiene instructor.
Prerequisite: DEN 101, 102 Dental Hygiene I and II and permission of Department Chairperson

DIETARY MANAGER

These courses are designed for individuals already employed in the food service field, as there is a requirement for supervised work experience by a Registered Dietitian. All persons entering the program are responsible for finding a preceptor, and registrations are on a pre-application basis.

DIA 101 Nutrition — 3 Credits

The social, cultural, psychological and physiological functions of food. Nutrition care throughout the life cycle. Special consideration given to modifications of the basic diet to meet the needs of the resident in health care facilities. Techniques of interviewing, medical ethics and documentation procedures of medical records.
2 Class Hours, 4 Directed Practice

DIA 102 Institutional Food Preparation — 3 Credits

Principles of food preparation, standardization of recipes, menu structure and planning. Serving, merchandising and promotion of food items. Emphasis on sanitation and safety practices in food service departments.
2 Class Hours, 4 Directed Practice

DIA 201 Food Management Systems — 3 Credits

Introduction to the health field and its interrelationships. Control through specification, purchasing, inventory, cost analysis. Equipment maintenance and management safety practices.
2 Class Hours, 4 Directed Practice

DIA 202 Personnel Management — 3 Credits

Leadership and supervisory techniques. Concepts of management including the principles of organizing, evaluating, and the decision-making process. Implications of authority and responsibilities. Understanding and communications with workers and co-workers. Employee recruitment, training and evaluation. Morale and labor relations.
2 Class Hours, 4 Directed Practice

EARLY CHILDHOOD

Early Childhood (CDC) courses may not be used to satisfy the Social Science requirement.

The Early Childhood program was developed with great flexibility in course selection and can be taken on a part-time basis by those individuals currently employed in the field. Those students who wish to pursue it on a full-time basis should contact the program Coordinator of Early Childhood. Very close planning and advisement will be necessary to pursue this program to its completion in two years.

MOST EARLY CHILDHOOD COURSES (THOSE WITH CDC DESIGNATION) ARE OFFERED ONLY IN THE EVENING. FULL-TIME EARLY CHILDHOOD STUDENTS MUST PLAN FOR BOTH DAY AND EVENING CLASSES.

*CDC 100 Introduction to Education of Young Children — 3 Credits

An over-all view of early childhood education and where it is going. Discussion of various philosophies and methods, programming, scheduling (what should go into scheduling a day for a pre-schooler and when). Focus on social, emotional and physical needs of young children and the importance of the "self concept" for both the child and the adult working with young children, Introduction to the College's Early Childhood program covering requirements, courses and career information. A required number of observations in pre-schools, nurseries and day care centers in the area, as well as special laboratory conferences. Required of Early Childhood majors.
2 Class Hours, 2 Laboratory Hours

*CDC 115 Music for Young Children — 3 Credits

How to develop the whole child through the use of music. This course will be of practical application for the teacher. Various techniques and methods will be demonstrated through the use of songs, records, eurhythmics, rhythm instruments and creative activities. Class participation will be a vital part of this course. Students will be expected to apply these various methods and activities with young children.
3 Class Hours

CDC 120 Curriculum Development — 3 Credits

A pre-school curriculum for students planning to work in day-care centers and nursery schools. Emphasis on how art, language, math, creative play, science and outdoor play programs are used for the physical, social emotional and mental development of the young child. Sharing and implementing ideas through special projects and construction and implementation of material related to specified areas. Students will be required to perform certain activities in a nursery school setting or with groups of children. Required of Early Childhood majors.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CDC 100 Introduction to Education of Young Children or Concurrent Enrollment

*CDC 140 Art for Young Children — 3 Credits

In-depth coverage of art education as it contributes to the pre-school child's emotional, physical and psychological growth. Needs of pre-schoolers in this area and ways to foster creativity and skill acquisition. Materials and methods appropriate for this age. A laboratory experience working with pre-schoolers in art will be required.
2 Class Hours, 2 Laboratory Hours

*CDC 150 Motor Development — 3 Credits

Designed to give the student an understanding of normal motor development and how it relates to cognitive and perceptual development. Students will be exposed to programs and activities in motor development for young children.
3 Class Hours

CDC 160 Nutrition for Young Children — 3 Credits

Basics of good nutrition with emphasis on children.Ideas on planning and preparing snacks and meals and teaching good nutrition habits to children. Ideas on fitting nutrition into the nursery education curriculum and tying it to other subjects. Projects for practical application and experience in a nursery school setting.
2 Class Hours, 2 laboratory Hours

*CDC 170 Practicum I — 3 Credits

Designed to meet the needs of both the experienced and the inexperienced students. The inexperienced student is placed in a classroom setting conducive to the learning of desired teacher competencies, working with an experienced supervising teacher. Six hours per week for 12 weeks in this situation. Self-evaluation as well as being evaluated by others. The experienced student continues working in early childhood setting, the practicum emphasizes self-evaluation according to classroom competencies. Both experienced and inexperienced students in group seminars with a college representative and meeting for individual consultation. Required of Early Childhood Majors.
Prerequisite: 30 hours of counseled coursework Taught Evenings, field work days

CDC 175 Techniques of Observation and Evaluation — 3 Credits

Develops skills and methods of observing young children in structured and unstructured situations. Covers ethnics, interpretations of children's behavior in light of development. Also record keeping techniques, projects using data gathered to evaluate children's abilities. Implications of evaluations. Required of Early Childhood Majors.
3 Class Hours

CDC 180 Child Health and Safety — 3 Credits

Designed to help students become aware of techniques for promoting general health care and safety standards at children's centers.
3 Class Hours

CDC 190 Infants, Toddlers and the Family — 3 Credits

The mother/father/baby triad and the challenges that parenting brings to the young family are examined. Single parents, parental attachment, adoption, positive self image, infant stimulation, teen pregnancy, community support for families, toddler discipline, delayed pregnancy. Gives prospective parents and teachers of young children insight into this critical period of life.
3 Class Hours

*CDC 210 Special Problems in Children — 3 Credits

How to understand and help the child with a special problem. Normal adjustment problems, learning disabilities, physical handicaps, retardation and the emotionally disturbed child. Techniques for the classroom teacher and places to get help. Actual student involvement with children who exhibit these problems.
2 Class Hours, 2 Laboratory Hours
Prerequisite: PSY 211 Child Development (Concurrent Enrollment Considered)

*CDC 220 Issues and Innovations in Early Childhood Education — 3 Credits

An overview and insight into various philosophies and materials of education for young children, including Montessori, Piaget, open education (comparing English and American schools), affecting education, behaviour modificatioon. This course aims to develop the competency of the student through practical application.
3 Class Hours
Prerequisite: CDC 100 Introduction to Education of Young Children

*CDC 230 Working with Parents in Early Childhood Programs — 3 Credits

Designed to introduce the need for the parent's involvement in the education of the young child. Benefits for teachers and parents which help or hinder their working together. Various aspects of working with parents, such as home visiting, group parent meetings, newsletters and written communications, parent conferences and the use of volunteers in the classroom. Part of the course on a workshop basis, and students required to develop a special project to earn their third credit.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CDC 100 Introduction to Education of Young Children

*CDC 245 Social Development of Young Children — 3 Credits

Explores the developmental, environmental and temperamental aspects of the socialization process. Topics include aggression, cooperation and sharing, moral development, peer interaction, sex-role development, communication in the classroom.
2 Class Hours, 2 Laboratory Hours

*CDC 250 Language in Early Childhood — 3 Credits

A developmental study of language growth in young children and its influence on learning (cognitive abilities, social and behavioral concepts). Contemporary language theories and programs including a diagnostic approach to teaching language (communications skills, reading readiness and literature appreciation) in the pre-school. The student will be expected to spend a number of hours in a special project requiring observation of individual children and language arts program.
3 Class Hours
Prerequisite: CDC 100 Introduction to Education of Young Children or Concurrent Enrollment

*CDC 290 Practicum II — 6 Credits

Designed to be flexible depending upon the needs and interest of the student. Approved projects for experienced students based on the development of these needs and interests. The experienced student shares ideas from his/her areas of strength in seminar situations. Inexperienced students,use classroom situations to conduct self-evaluations of own competencies as teachers,and are evaluated by others, including an experienced supervising teacher. The inexperienced teacher, as well as being evaluated by others, works with an experienced supervising teacher. The inexperienced student to spend nine hours per week in a classroom situation for 12 weeks. Required of Early Childhood majors.
Prerequisite: CDC 170 Practicum I
Taught evenings, field work days

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**

*CDC 299 Independent Study in Child Care 1-3 Credits

An individual student project in child care beyond the scope of requirements offered by the department. Under the direction of a faculty member and approved by the program coordinator and department chairman. No more than three credits may be acquired toward the Early Childhood degree in independent study projects.
1-3 Class Hours
Prerequisite: 6 Semester hours in Early Childhood courses

ECONOMICS

ECO 101 Consumer Economics 3 Credits

Institutions and forces directly affecting the consumer, consumer income and expenditure patterns, personal finance, credit and tax problems, personal investment alternatives. Impact of the consumer movement on the individual and society.
3 Class Hours

ECO 104 Labor Economics and American Industry 3 Credits

Interaction among business, labor and government. Analysis of the causes of unemployment and income inequality. Connection among productivity, wages, prices and employment and application of anti-trust and labor laws to firms and unions.
3 Class Hours

ECO 110 Introduction to Micro-Economics 3 Credits

Supply, demand and the market system as they relate to contemporary economic problems including poverty, energy, the environment and urban decay. The allocation of resources under conditions of competition and various degrees of monopoly. Rationale behind anti-trust laws and other economic systems.
3 Class Hours

ECO 111 Introduction to Macro-Economics 3 Credits

Causes of unemployment and inflation and the government's efforts to control them. Problems of economic growth as they relate to our economy and the other countries, developed and underdeveloped. International trade and finance problems.
3 Class Hours

ECO 140 Economics of Urban Problems 3 Credits

Application of economic analysis to urban problems, an understanding of the economic forces that affect housing, transportation, poverty, crime, land use, the financing of urban services and the urban future.
3 Class Hours

ECO 253 Money and Banking 3 Credits

An examination of money, credit and financial institutions, emphasizing how the monetary system influences economic activity. Nature and functions of money, the commercial banking system and other financial institutions, the roles of the Federal Reserve System and the Treasury, monetary policy and international money problems.
3 Class Hours
Prerequisite: ECO 111 Introduction to Macro-Economics

ECO 299 Independent Study - Economics 1-3 Credits

An individual student project in economics which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisite: 3 Semester hours is economic

ELECTRICAL ENGINEERING TECHNOLOGY

EET 100 Introduction to Electrical Engineering Technology ½ Credit

Introduction to Electrical Engineering Technology, career opportunities, transfer opportunities, study skills and college services. An association with industry is established through field trips and panel discussions involving industry representatives. Reasonable proficiency in the use of hand held calculator is developed. A scientific hand held calculator is required for this course.
1 Class Hour

***TAUGHT EVENINGS AND ONLY WHEN ENROLLMENT PERMITS**
†These courses carry separate grades for lecture and laboratory
‡Combined lecture-laboratory courses; final grade depends on successful completion of both parts.

‡EET 111 Electrical Construction Laboratory I 2 Credits

Advanced knowledge about today's electrical equipment. Experience in the installation, fabrication and maintenance of electrical equipment by means of "hands on" approach. Shop safety and the National Electrical Code. Basic residential and commercial wiring procedures, basic measuring techniques, fundamentals of basic machine operations. Safety Glasses are required for this course.
1 Class Hour, 3 Laboratory Hours

EET 112 Electrical Construction Laboratory II 1 Credit

Advanced wiring methods, fractional horsepower motor and appliance troubleshooting, introduction to residential and commercial lighting and power lay-out design. Safety glasses are required for this course.
3 Laboratory Hours
Prerequisite: EET 111 Electrical Construction Laboratory I

†EET 121 Electrical Circuits & Laboratory 4,1 Credits

Fundamentals of electrical circuits and application of circuit laws, theorems and measuring techniques to both d-c and a-c single and polyphase circuits.
4 Class Hours, 3 Laboratory Hours
Prerequisite or Corequisite: MAT 139 and MAT 140 or equivalent.

*‡EET 125 Circuits I 3 Credits

D-c circuits, including loop and nodal analysis, superposition, Thevenin's and Norton's theorems, RL and RC time constants.
2 Class Hours, 2 Laboratory Hours
Prerequisite or Corequisite: MAT 139 Algebra or equivalent

*‡EET 126 Circuits II 3 Credits

A continuation of the study of circuits concepts related to single and three-phase alternating current. Resonance, network analysis, power.
2 Class Hours, 2 Laboratory Hours
Prerequisite or Corequisite: MAT 140 Trigonometry or equivalent and EET 125 Circuits I.

EET 130 Engineering Drawing 1 Credit

Principles of projection. Development of drafting skills, lettering and proper line construction. Dimensioning and tolerancing, with an emphasis on shop processes. Use of auxiliary views and sectioning. Preparation for assembly drawings, materials lists, schematic and wiring diagrams.
3 Laboratory Hours

† EET 150 Electronic Devices & Laboratory 4,1 Credits

A first course in Electronics introducing the devices fundamental to the field. Introduction of semiconductor diodes, bipolar and field effect transistors, thyristors, operational amplifiers, microprocessors. Design and analyze representative circuits based on these building blocks. Competency in FORTRAN IV computer language is required and is applied to generate software for design and analysis of related circuits.
4 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 161 Pre-calculus and CST 141 FORTRAN Programming with Graphic Applications and EET 121 Electrical Circuits

EET 162 Computer Aided Network Analysis 3 Credits

Computer analysis of complex electrical and electronic networks by application of network theorems and application of software as needed. Use of a second computer language to display the response of two port networks. Use of the computer to apply matrix methods to the analysis of complex circuits and the solution of network problems.
3 Class Hours
Prerequisite: CST 141 FORTRAN Programming with Graphic Applications and EET 121 Electrical Circuits and MAT 161 Pre-calculus

‡EET 181 Installation and Maintenance of Electrical Motors 2 Credits

Theory, operation and application of electrical machines and control systems as related to industry. Installation, maintenance and trouble-shooting of electrical motors and control systems emphasized.
1 Class Hour, 2 Laboratory Hours

‡EET 183 Applied Electricity 3 Credits

Practical applications of electrical concepts as applied to basic circuits, motors and transducers. Laboratory work includes demonstration of basic electrical concepts using measuring instruments such as digital multimeters, oscilloscopes, function generators, counters, wattmeters, bridges and transducers as sensors.
2 Class Hours, 3 Laboratory Hours
Prerequisite: PHY 142 Physics and MAT 161 Pre-calculus

‡EET 186 Electronics — 3 Credits

Practical applications of electronic concepts as applied to solid state devices, amplifiers, power supplies, oscillators, timers, multivibrators and basic logic devices and transducers. Laboratory work includes practical applications of concepts by students, operation of common electronic instruments such as oscilloscope, curve tracer, function generator and counter.
2 Class Hours, 3 Laboratory Hours
Prerequisite: EET 183 Applied Electricity

EET 230 Electronic Design and Fabrication — 1 Credit

Selection, package design and construction of an electronic project and preparation of related drawings. Use of various manufacturing processes to fabricate the project. Use of industrial standard drafting practices to properly describe the operations. Chassis layout, printed circuit board design, exposure, and machining, wiring, soldering and enclosure fabrication are required.
3 laboratory Hours
Prerequisite:EET 112 Electrical Construction Laboratory II and EET 130 Engineering Drawing and EET 251 Electronic Circuitry & Laboratory

*‡EET 235 Electrical and Electronics Drawing — 2 Credits

Graphic representation of circuitry related to the electrical and electronics fields. Use of industrial standards and symbolism to draw electronic, schematic and wiring diagrams, printed circuit layout and electronics assemblies. Construction of one-line power distribution diagrams, industrial motor control diagrams and commercial lighting layout.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MET 113 Engineering Drawing and EET 225 Electronics I

†EET 243 Energy Conversions & Laboratory — 4,1 Credits

Theory, operation and application of d-c and a-c motors and generators, and their magnetic and solid state control. Theory and application of single and polyphase power transformers and rectifiers.
4 Class Hours, 3 Laboratory Hours
Prerequisite: EET 150 Electronic Devices

†EET 244 Control Systems & Laboratory — 3,1 Credits

Theory, operation and application of a-c and d-c servo systems, industrial robots and process control techniques. Theory of open and closed loop systems.
3 Class Hours, 3 Laboratory Hours
Prerequisite: EET 243 Energy Conversions and Laboratory

*‡EET 245 Energy Conversions and Control Systems — 4 Credits

D-c and a-c electrical machines theory, applications, and control. Single phase and polyphase power transformers and rectifiers. Application of industrial control systems.
3 Class Hours, 2 Laboratory Hours
Prerequisite: EET 126 Circuits II

†EET 251 Electronic Circuitry & Laboratory — 3,1 Credits

A second course in Electronics that incorporates the devices introduced in EET 150 Electronic Devices into representative circuits of moderate complexity. These include multi-stage tuned amplifiers, instrument and transducer amplifiers, op-amp active filters and other related data acquisition circuits. Practical considerations including heat sinking, noise, electromagnetic interference, and appropriate device selection. The BASIC and FORTRAN IV computer languages are required for applications software used to design and analyze multi-stage and active filter circuits.
3 Class Hours, 3 Laboratory Hours
Prerequisite: EET 150 Electronic Devices

†EET 252 Electronic Systems & Laboratory — 3,1 Credits

A third course in Electronics that uses the circuit concepts used in EET 251 Electronic Circuitry to develop larger systems currently used in the electronics field. These include transducers, interface and data acquisition systems, switchmode power supplies, telecommunications, phase locked loops, television and communication systems. Emphasis on interface between the analog and digital world. Computer used throughout the semester to aid in design and debug of systems.
3 Class Hours, 3 Laboratory Hours
Prerequisite: EET 251 Electronic Circuitry

*‡EET 255 Electronics I — 4 Credits

A first course in Electronics introducing the devices fundamental to the field. Introduction of semiconductor diodes, bipolar and field effect transistors, thyristors, op-amps. Design and analyze representation circuit based on these building blocks.
3 Class Hours, 2 Laboratory Hours
Prerequisite: EET 126 Circuits II

*‡EET 256 Electronics II — 4 Credits

A second course in Electronics that incorporates the devices introduced in EET 256 Electronics I into representative circuits of moderate complexity. These include multi-stage tuned amplifiers, op-amp active filters, and other related data acquisition circuits. Practical considerations including heat sinking, noise, electromagnetic interference, and appropriate device selection.
3 Class Hours, 2 Laboratory Hours
Prerequisite: EET 255 Electronics I and CST 122 Scientific Computer Programming - FORTRAN

*‡EET 257 Electronics III — 4 Credits

A third course in Electronics that uses the circuit concepts used in EET 256 Electronics II to develop larger systems currently used in the electronics field. These include switchmode power supplies, phase locked loops, communication systems, and interfacing systems. Computer used to aid in design and debug of systems.
3 Class Hours, 2 Laboratory Hours
Prerequisite: EET 256 Electronics II

†EET 267 Digital Electronics and Microprocessors I & Laboratory — 3,1 Credits

Study of number systems, logic gates (TTL/CMOS), counters, shift registers, codes, types of memories, Boolean algebra, reduction theorems, and black box design applied to data transmission, computer arithmetic, and microprocessor operations. Microprocessor (8080, 8085 and Z80) assembly language programming using assemblers, disassemblers, monitors, loaders, logic analyzers and other tools related to industrial applications of microcomputers. Internal operation of a computer from a block diagram approach. Applications include software scrolling, IC testing, traffic controllers, display systems, and math operations. Appropriate laboratory exercises provide hands-on experience in three areas - digital circuitry, microprocessor assembly language, and microprocessor interface hardware.
3 Class Hours, 2 Laboratory Hours
Prerequisite: EET 150 Electronic Devices or EET 255 Electronics I and CST 122 Scientific Computer Programming - FORTRAN or CST 141 FORTRAN Programming with Graphic Applications

*‡EET 268 Digital Electronics and icroprocessors II & Laboratory — 4 Credits

Use of modern microprocessors (Z80, 8086 and 68000) in real time control applications such as testing complex circuitry using microcomputers, display systems, speech synthesis, EPROM and EEPROM programming, ultrasonic techniques, data manipulation, multiplexing, video games, satellite receivers, encryption techniques, disk controllers , array processors, and other modern topics in the microcomputer world. Use of development systems (UNIX based), logic analyzers, and high level languages. Students undertake a project related to the field and study the differences between eight other popular microprocessors. Assembly language skills learned in EET 267 Digital Electronics and Microprocessors I are tuned and further software development takes place.
3 Class Hours, 2 Laboratory Hours
Prerequisite: EET 267 Digital Electronics and Microprocessors I

EET 299 Independent Study — 2-4 Credits

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a job-related assignment. Any independent study project is based on instructor availability.
Prerequisite: Department Approval

ENGINEERING

EGR 100, 200 Orientation — 0 Credits

Attendance at these sessions assures the Engineering Science student a smooth transition into and out of Broome Community College. Guest speakers discuss common problems engineering students encounter. Representatives from transfer schools introduce their respective institutions to students. Common exams will be scheduling during these sessions.
2 Class Hours

EGR 150 Engineering Graphics — 2 Credits

Fundamental course in drawing techniques and interactive computer graphics, orthographic projecting, dimensioning, true length, true size, relationships between lines and planes, interactive three-dimensional graphics using BASIC programming. For Computer Science and Engineering Science students.
1 Class Hour, 2 Laboratory Hours
Corequisite: EGR 100 Orientation

***TAUGHT EVENINGS AND ONLY WHEN ENROLLMENT PERMITS**
†These courses carry separate grades for lecture and laboratory
‡Combined lecture-laboratory courses; final grade depends on successful completion of both parts.

EGR 151 Applications in Engineering — 3 Credits

Applications of computers to the solution of Engineering problems. Programming in BASIC and FORTRAN on the personal computer and commercial integrated programs will be used to solve problems in data analysis, and equation solving. Example problems will include: curve fitting, mean-median mode, Gauss elimination, numeric integration, finite nodal analysis, and z-nomograms.
2 Class Hours
Prerequisite: EGR 150 Engineering Graphics

EGR 281 Mechanics (Statics) — 3 Credits

Fundamental concepts of the statics of rigid bodies developed by using a vector analysis approach. Force systems, centroids and centers of gravity, analysis of structures, shear and bending moments, friction and moments of inertia.
3 Class Hours
Prerequisite: 1 year of Calculus and PHY 181 Physics I
Corequisite: EGR 200 Orientation

EGR 282 Mechanics (Statics) — 3 Credits

Concepts using vector analysis approach to kinematics and kinetics of particles, systems of particles, kinematics and kinetics of rigid bodies. Forces, mass, acceleration impulse, momentum, work and energy techniques.
3 Class Hours
Prerequisite: EGR 281 Mechanics (Statics)
Corequisite: EGR 200 Orientation

EGR 283 Strength of Materials — 3 Credits

Topics to be covered are Normal, Shear and Bending Stress, Normal and Shear Strain, Stress-Strain Diagram. Torsion, Stress and Deformations in Pure Bending, Sheaar Stress in Transverse Loading, Mohr's Circle for Plane Stress, Design of Beams for strength, Deflection of Beams, Energy Methods, Columns.
3 Class Hours
Prerequisite: EGR 281 Mechanics (Statics)
Corequisite: EGR 200 Orientation

EGR 284 Strength of Materials — 3 Credits

Atomic model, bonding, lattice concept, crystal types, imperfections, stress and temperature effects, phase diagrams, alloys, ceramics, glass, concrete, polymers, corrosion.
3 Class Hours
Prerequisite: PHY 182 Engineering Physics II and CHM 146 Chemistry
Corequisite: EGR 200 Orientation

EGR 285 Electrical and Electronic Circuits — 3 Credits

Kirchoff's Laws, energy and power. Resistance, inductance and capacitance parameters. Series and parallel circuit's, superposition theorem, network analysis by mesh currents., nodal techniques, Thevenin's Theorem. Techniques for solving step response, pulse response, forced response, natural response and complete response. A-c circuits, phasors, impedance, resonance. Operational amplifiers and feedback.
3 Class Hours
Prerequisite: 1 year of calculus and PHY 182 Engineering Physics II
Corequisite: EGR 100 Orientation

EGR 286 Engineering Analysis — 1 Credit

Introduction to microprocessors with digital logic
1 Class Hour
Prerequisite: 1 year of calculus and PHY 182 Engineering Physics II
Corequisite: EGR 285 Electrical and Electronic Circuits and PHY 281 Engineering Physics III

EGR 287 Engineering Science Laboratory I — 1 Credit

Experimentation in digital logic and microprocessors, software and hardware interfacing.
3 Laboratory Hours
Prerequisite: 1 year of calculus and PHY 182 Engineering Physics II
Corequisite: EGR 285 Electrical and Electronic Circuits and PHY 281 Engineering Physics III

EGR 288 Engineering Science Laboratory II — 1 Credit

Experimentation in digital logic and microprocessors, software and hardware interfacing.
3 Laboratory Hours
Prerequisite: EGR 287 Engineering Science Laboratory I
Corerequisite: EGR 286 Engineering Analysis

EGR 299 Independent Project — 2-4 Credits

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving work assignment.
Prerequisite: Department Approval

ENGLISH

After completing a writing sample, students with serious deficiencies will be required to enroll in ENG 090 Basic Language Skills or ENG 110S Written Expression I. Students generally begin a composition sequence with ENG 110 Written Expression I.

ENG 090 Basic Language Skills — 0 Credits

Writing workshops designed to improve a student's mastery of composition skills, including patterns of sentence structure and the recognition and correction of common errors in grammar and usage. (This course not applicable toward any degree.)
Minimum 3 Class Hours

ENG 106, 107, 108 English as a Second Language

See Page ##.

ENG 110 Written Expression I — 3 Credits

Study and practice in the composition of ideas and information. Sentence and paragraph development, unity, coherence, style. Nature of language, including investigation of various aspects of communication to stimulate critical thinking.
3 Class Hours
Prerequisite: Placement test or ENG 090 Basic Language Skills

ENG 110S Written Expression I — 3 Credits

Same as ENG 110 Written Expression I with one additional hour of supplemental help.
4 Class Hours

ENG 120 Written Expression II — 3 Credits

Further study and practice in critical and evaluative writing based upon analysis of major types of imaginative literature. Familiarization and practice with research procedures.
3 Class Hours
Prerequisite: ENG 110 or ENG 110S Written Expression or permission of instructor

ENG 150 Technical Writing — 3 Credits

Principles and practice of writing to be eventually required of students of technology programs as part of their professional duties. Emphasis on analysis and preparation of reports, articles and technical correspondence.
3 Class Hours
Prerequisite: ENG 107 English as a Second Language, Advanced or ENG 110 or ENG 110S Written Expression I or permission of instructor.

ENG 160 Expository Writing — 3 Credits

An intensive course in expository, persuasuve and critical writing for students who have already mastered the basic skills of written expression. Emphasis in critical reading of professional essayists and articles.
3 Class Hours
Prerequisite: ENG 120 Written Expression II

ENG 163 Reporting — 3 Credits

An introduction to the basics of New Reporting for print journalism. Student newspaper used for workshop and actual publication.

ENG 163L Journalism Laboratory: Fulcrum — 1 Credit

Reporting, writing and editing the Fulcrum, the campus newspaper. Designed for editors and staff members of the Fulcrum.
3 Laboratory Hours (May be repeated for credit)

ENG 168 News Editing — 3 Credits

The basics of editing, headline writing, layout, and design for print journalism. Student publication used for hands on experience.
3 Class Hours
Prerequisite: ENG 163 Reporting or ENG 110 or ENG 110S Written Expression I plus permission of instructor

ENG 170 Creative Writing — 3 Credits

Designed to provide students interested in imaginatice writing with the opportunity to investigate concepts and to practice techniques implicit in prose, poetry and drama. Class discussion, workshops and personal conferences with the instructor.
3 Class Hours plus Workshop Hours

ENG 175 Creative Writing - Publication — 4 Credits

Designed to provide students interested in imaginative writing with the opportunity to investigate concepts and to practice techniques implicit in prose, poetry and drama. Class discussion, workshops and personal conferences with the instructor, writing, evaluating and arranging material for a campus literary journal.
3 Class Hours

ENG 299 Independent Study: English — 3 Credits

An individual student project concerned with advanced work in a specific area of language or literature. Conducted under the direction of a faculty, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: One semester of college level work.

ENGLISH-AS-A-SECOND-LANGUAGE (ESL) COURSES

International students and residents of other nations may be admitted to the College if they meet special entrance requirements (see page ##). However, admission to the College does not guarantee admission into a particular degree program. All degree programs require English Language proficiency equivalent to ENG 106 for entry. Students who do not meet this requirement but satisfy other College admission requirements for foreign students are placed into a English-as-a Second-Language program (ESL) designed to bring their language competency up to a level appropriate for success at most American colleges and universities. Placement is determined after the student arrives on campus and depends on the special language exam administered by the English Department. For students entering at the lowest level of English proficiency, the following two semester program will be necessary. Students who enter at the ESL 103 or ESL 113 level will require more than two years to complete a degree.

Semester I (ESL 103 Series)

Course	Credits
ESL 103	5
ESL 104	4
ESL 105	4
SAC 110 (see p. 99)	2
Elective from regular currriculum	3
	18

Semester II (ESL 113 Series)

Course	Credits
ESL 113	4
ESL 114	4
ESL 115	4
Electives from regular curriculum	3-6
	15-18

The College does not normally admit students who require training below the ESL 103 level. However, it is prepared to offer ESL below this level if students are admitted in groups or 10 or more. Currently, ESL 003, 004 and 005 are being offered to a group of international students. Students may combine ESL 102 with the ESL 003 series or the ESL 103 Series to make up a 25 hour intensive language program.

ESL 003 English as a Second Language, Elementary Grammar — 4 Credits

Introduction of basic English grammar, both oral and written, for non-native speakers. Curriculum will include study of basic verb tenses, noun categories, and basic affirmative, negative, and interrogative sentence patterns. The materialwill reinforce what is taught in ESL 004 and 005. Taken together these courses are referred to as the ESL 003 Series. (This course is not acceptable for credits toward a degree).
4 Class Hours, 2 Laboratory Hours
Prerequisite: Diagnostic Test

ESL 004 English as a Second Language, Elementary Oral/Aural Skills — 4 Credits

A course for students who speak little or no English. The sounds of English are presented systematically and language laboratory practice is required. Ear training is begun and strengthened through work in the listening laboratory. Students are taught communicative skills from the outset, and the emphasis is on speaking and being understood. (This course is not acceptable for credit toward a degree).
4 Class Hours, 2 Laboratory Hours
Prerequisite: Diagnostic Test

*** TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**

ESL 005 English as a Second Language, Elementary Reading Skills — 4 Credits

For non-natives who had little exposure to written English. Basic sentence structure and vocabulary will be studied in order to improve student's comprehension, from simplified reading texts to those of increasing complexity. Writing skills, simple sentence structures, and organizational skills are also stresses. (This course is not acceptable for credits toward a degree).
4 Class Hours, 2 Laboratory Hours
Prerequisite: Diagnostic Test

ESL 102 English as a Second Language, Basic Writing Skills — 5 Credits

Introduction to the basic rhetorical/sentence patterns of English and their usage, organizational and developmental writing skills. Focus on the expression of ideas/concepts and their presentation in simple and complex sentence form, proof reading and editing skills, Note taking, outlining and Computer assisted instruction. (This course is not acceptable for credits toward a degree).
4 Class Hours, 3 Laboratory Hours
Prerequisite: Diagnostic Test

[Intensive English as a Second Language Program]

Students may combine ESL 102 with the ESL 003 series or the ESL 103 series to make up a 25 hour intensive language program]

ESL 103 English as a Second Language, Grammar Review — 5 Credits

Intensive review of pre-intermediate levels of the Elglish language for international students. Emphasis on listening, reading, speaking and some aspects or writing. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
4 Class Hours, 2 Laboratory Hours



ESL 104 English as a Second Language, Basic Speech — 4 Credits

To provide international students with practice, articulation and vocabulary needed to increase self-confidence in English conversation, discussion in the classroom and other daily situations. Audio-lingual laboratory. (This course is not acceptable toward a degree.)
3 Class Hours, 2 Laboratory Hours

ESL 105 English as a Second Language, Basic Reading — 4 Credits

Review of English sound-symbol correspondence, utilization of brief recombinations of variations of narratives and dialogues, and acquisition of simple reading techniques through exposure to uncomplicated reading selections. Vocabulary and reading comprehensive development, audio-lingual practice - active, passive, comparative. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours

ESL 113 English as a Second Language Intermediate Composition — 4 Credits

Study of the English language for international students with listening, reading, speaking, writing skills on the intermediate level. Language workshops emphasizing grammar, syntax, vocabulary and composition. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours
Prerequisite: ESL 103 English as a Second Langauge, Grammar Review or equivalent

ESL 114 English as a Second Language, Intermediate Speech — 4 Credits

Designed for international students emphasizing free and controlled conversation and discussion. Continues practice in articulation, phrasing and vocabulary building. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours
Prerequisite: ESL 104 English as a Second Language, Basic Speech or equivalent

ESL 115 English as a Second Language, Intermediate Reading — 4 Credits

Study of lexical, grammatical, and social-cultural meaning through intensive and extensive reading.Establishment of reading fluency and independence in English. Continues development of vocabulary and reading comprehension. Direct and audio-lingual practice with selected texts and exercises. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours
Prerequisite: ESL 105 English as a Second Language, Basic Speech or equivalent

Students who enter at the ESL 103 or ESL 113 level will require more than two years to complete a degree. For degree programs requiring six credit hours of English Composition, students may use ENG 107, 108, 110, 120 or 150 depending on their degree program requirements and their English placement scores. Students placed in any ESL course are required to take English every semester until their English program requirements are met.

ENG 106 English as a Second Language, Intermediate II — 3 Credits

Expanded study of the English language for international students. Emphasis on the development of basic English compositional skills. Continued practice in listening, reading, and speaking.
3 Class Hours
Prerequisite: ESL 113 English as as Second Language, Series or equivalent

ENG 107 English as a Second Language, Advanced I — 3 Credits

Advanced study and practice in the composition of ideas and information for international students. Sentence and paragraph development, unity, coherence, style. WRiting workshops for intensive practice in the information of standard and idiomatic English. Investigation of the nature of language and various aspects of communication to stimulate critical thinking.
3 Class Hours (Equivalent to ENG 110 for foreign students)
Prerequisite: ENG 106 English as a Second Language, Intermediate II or equivalent

ENG 108 English as a Second Language, Advanced II — 3 Credits

Further study and practice in critical and evaluative thinking and writing for international students, based upon analysis and exposure to prose as well as major types of imaginative literature. Additional practice and familiarization with research procedures. Writing workshops and indicual conferences to guide the international student through writing assignments.
3 Class Hours (Equivalent to ENG 120 for foreign students)
Prerequisite: ENG 107 English as a second language, Advanced I

FIRE PROTECTION TECHNOLOGY

*FRS 101 Fire Prevention and Protection — 3 Credits

Methods, policies and proecdures relative to establishing and operating appropriate fire prevention and protection programs.
3 Class Hours

*FRS 103 Fire Fighting Tactics and Strategy — 3 Credits

Focus on pre-planning and the development of fire figthing tactics appropriate or a wide variety of hazards. Review of basic information and some local conditions. The case study method is used to develop plans and tactics relating to the student's own departments.
3 Class Hours

*FRS 105 Arson Investigation — 3 Credits

Fire investigations and arson. Responsibilities of the arson investigator, tools of the investigator, photography, electronic devices. laws pertaining to arson, motives and tools of the arsonist, courtroom procedures. A field experience will be included.
3 Class Hours

*FRS 107 Legal Aspects of the Fire Service — 3 Credits

Laws and regulations as they pertain to the fire service and its personnel. Legal terminology necessary for the interpretation of pertinent laws and decisions. Legal status of the fireman, as well as fireman's rights, duties and liabilities. Responsibilities and powers of the service in enforcement of ordinances and codes.
3 Class Hours

*FRS 108 Building Construction for Fire Science — 3 Credits

Fire fighters are confronted with many unknown factors at the fire ground. Among these is the unknown structural stability of the buildings they must enter. Basic principles of building construction and design with emphasis focused on fire protection concerns. Building materials included.
3 Class Hours

*FRS 200 Hazardous Materials — 3 Credits

Chemicals and chemical processes most closely involved in fire protection and fire fighting. Use, storage, transportation and disposal of hazardous materials with emphasis on flammable liquids, flammable solids, oxidizing materials, corrosive liquids, compressed gases.
3 Class Hours
Prerequisite: Chemistry or department permission

*FRS 201 Fire Service Hydraulics — 3 Credits

Application of the laws of mathematics and physics to properties of fluid states, force pressure and flow velocities. Emphasis in applying principles of hydraulics to fire-fighting problems.
3 Class Hours
Prerequisite: MAT 139 Algebra

*FRS 205 Fire Department Administration — 3 Credits

Organization of the fire departments with emphasis on personnel management, distribution of equipment, maintenance of records, communications, data collection and community relations. ISO Grading Schedule.
3 Class Hours

*FRS 250 Special Topics — 1-3 Credits

Exploration of special topics in Fire Protection Technology. May be repeated since topics will vary from semester to semester.

*FRS 299 Independent Study: Fire Service — 1-3 Credits

An individual student project in an area of fire protection or service beyond the scope of regular courwork. Conducted under supervision of coordinator and approved by deparment chairperson.
Prerequisite: 6 Credits in FRS coursework and 6 Credits in General Education courses

FRENCH

PLACEMENT IN LANGUAGE - Generally one year of high school foreign language is equivalent to one semester in college. Students with two years of language in high school should register for intermediate level courses.

FRE 101, 102 Beginning French — 4, 4 Credits

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Reading and discussion of graded literacy and cultural texts.
4 Class Hours
Prerequisite: FRE 101 Beginning French for FRE 102

FRE 201 Intermediate French I — 3 Credits

Intensive review of grammar and syntax and oral practice in classroom. Reading and discussion of works selected by the instructor.
3 Class Hours
Prerequisite: FRE 102 Beginning French

FRE 202 Intermedicate French II — 3 Credits

Reading of literary works of recognized authors. Continuation of grammar, syntax and oral practices in classroom and audio-lingual laboratory.
3 Class Hours
Prerequisite: FRE 201 Intermediate French I

GERMAN

GER 100 Practical German: 10 Minutes a Day — 2 Credits

Practical and simplified approach to speaking and understanding German. Emphasis on important and necessary aspects of everyday communication. Vocabulary and pronunciation acquisistion through use of instructor's expertise, flash cards, stickers, illustration, and sign recognition. (Does not satisfy language requirement.)
2 Class Hours

GER 101, 102 Beginning German — 4, 4 Credits

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Written homework assignments, supplemented by work in audio-lingual laboratory. Reading and discussion of graded literary and cultural texts.
4 Class Hours
Prerequisite: GER 101 Beginning German for GER 102

GER 201 German Conversation and Composition — 3 Credits

Emphasis on the four language skills - reading, writing, speaking, listening - especially on speaking and writing. Intensive discussion of style, grammar and the contemporary idiom to enhance the student's ability to express himself in German.
3 Class Hours, 1 Laboratory Hour
Prerequisite: GER 102 Beginning German

GER 202 Introduction to German Literary Analysis — 3 Credits

Reading and analytical discussion of original texts of standard authors from early writings through the 20th century with cultural historical implications. Essays and reports on reading in German.
3 Class Hours
Prerequisite: GER 102 Beginning German

HEALTH SERVICES

HSV 101 Cardio-Pulmonary Resuscitation — ½ Credits

Procedures necessary in administering CPR in emergency situations. Americal Red Cross modular method of teaching with certification. Performance of mastery level by demonstration and exam. Required for all Health Science students. Will be given in 2-hour sessions to make a total of 8 hours.

HISTORY

Either HIS 100 Rise of the West or HIS 115 Modern Global History is a core course required of all Liberal Arts students. Either one is a prerequisite for other history (HIS) courses. However, even where it is not a prerequisite students are urged to complete one of these courses before enrolling in any other history course. NOTE: HIS 100 and HIS 115 can be used to satisfy the second 3 credits Histiry requirement.

HIS 100 The Rise of The West — 3 Credits

Introduction to both the study of history and the evolution of modern society, including its basic ideas, values and institutions, through an examination of Western Civilization. The Age of Transistion - the Renaissance, the Reformation, the Scientific Revolution, and the Enlightenment. The Industrial Transformation, appearance of modern constitutional and authoritarian government, major socio-political ideologies - liberalism, socialism, communism, nationalism, imperialism, fascism, totalitarianism. The intellectual crisis of the 20th Century, World Wars I and II.
3 Class Hours

HIS 101-H Making of the Modern World I — 3 Credits

The revolution of modern society, from the Renaissance to the end of the nineteenth century. Introduction to the nature and study of history. Emergence of Western Civilization-Renaissance, Reformation, scientific, technological, econimic, and social revolutions. Age of power-absolutism, parliamenntary government, the Enlightment. Age of Revolution - American and French Revolutions, industrialization, modern political ideas, romantic and modern culture. Global Civilization - great discoveries, colonial empires modern imperialism. (For Honor Students)
3 Class Hours

HIS 102-H Making of the Modern World II — 3 Credits

A survey of the world in the 20th century, stressing the historical roots of contemporary societies. Origins and consequences of the First World War, the Russian Revolution and development of the USSR under Lenin and Stalin. Europe and the U.S. between the wars. Revolutions in science, views of man and society, art, music, and literature. Development and institutionalizing of fascism, origins and consequences of World War II. Impact on colonial empires in Asia and Africa, independence movements and revolutions. The contemporary scene. (For Honor Students)
3 Class Hours

HIS 115 Modern Global History: The World in Transition — 3 Credits

Historical Development of Western Civilation in the 19th-20th centuries, contrasted with selected non-Western societies. The key theme of the effects of modernity examined in several aspects: the regional nature of geography and demography; the important influences of traditional values and religious beliefs in the areas selected for study; the evolution of capitalism, socialism and communism, and nationalism and how these concepts affected less developed countries; the impact of industralization, colonialism, technology and science on the peoples of the contemporary world.
3 Class Hours

CIVILIZATION SURVEYS (HIS 130-161)

Liberal Arts students may select any one of the following courses to satisfy the remainder of the history requirement.

HIS 130 United States History I — 3 Credits

The United States from 1607 to 1898. The colonies, Revolution, Constitution, early national period, Age of Jackson, expansion, Civil War and Reconstruction, the West and the Gilded Age. Survey of political, economic, cultural developments through the 19th Century.
3 Class Hours

HIS 131 United States History II — 3 Credits

The United States from 1898 to the present. The American Empire, progressive reforms, World War I, the Twenties, Depression, New Deal, World War II and the Cold War, post-domestic issues.
3 Class Hours

HIS 140 History of Latin America — 3 Credits

History of Latin America from the Age of Discovery and Conquest through the 19th Century (1492 to 1890). Indian Cultures of Central and South America (Aztec, Inca, Maya), spanish conquistadors (Cortes, Pizzarro), Portuguese adventurers, imposition of European rule, Independence Wars, national identities, rise of the masses. Story of economic oppression, political authoritarianism, cultural vitality, and triumph over despair.
3 Class Hours

HIS 141 History of Latin America II — 3 Credits

History of Latin America from the 1890's to the present, emphasizing the causes of political instability and ecoomic backwardness. Close analyses of reform, reactionary and revolutionary movements in modern Latin America and of inter-American affairs.
3 Class Hours

SPECIAL TOPICS IN HISTORY (HIS 170-199)

HIS 170 The Future as History: A Look at the 21st Century United States — 3 Credits

Does the future have to be a shock? The objective of this course it to prove it does not have to be. Three or four possible courses which the next 100 years may take will be plotted, using knowledge of the economic, political nad social developments of the past 100 years of U.S. history and a basic understanding of the present day situation.
3 Class Hours
Prerequisite: HIS 130 United States History I or HIS 131 United States History II or POS 201 Introduction to American government.

HIS 175 Local History — 3 Credits

The early history of our local area including the late 18th Century Indian communities and the growth of 19th Century white settlements through development of industries and institutions from the days of the frontiersmen to the era of the railroaders and the factory hands. Historical methods of research. An historical walking tour of Binghamton, investigation of historical records on the premises of cooperative local institutions, and observation of contributions to local history. (Formerly HIS 231.)
3 Class Hours

HIS 180 Utopia: Visions of the Good Society — 3 Credits

Examines the functions of the Utopian Impulse throughout modern history as a series of "thought experiments" which address the question "what constitutes the Good Society?" Includes a comparative analysis of various representative utopias such as those of T. More, E. Ballamy, W. Morris, C.P. Gilman, H.G. Wells, B.F. Skinner, etc. Consideration will also be given to several representative anti-utopias/dystopias such as those of A.X. Huxley, G. Orwell, etc.
3 Class Hours

HIS 183 Herstory: Woman as a Historical Force — 3 Credits

A look at various ideologies about women compared to reality; varying attitudes toward women and where they originated; resulting roles assigned and contribution made by women in western civilization, with emphasis on the United States.
3 Class Hours

HIS 185 Hitler and The Nazi Dictatorship — 3 Credits

Origins of National Socialism, role of Adolf Hitler, road to Nazi Dictatorship, Nazi political and social revolutions. Hitler's foreign policy and Europe reaction, World War II and Hitler's "New Order," Nazi system of persecution and genocide, collapse of the 1,000-year Reich, legacy of the Hitler period.
3 Class Hours

HIS 186 Modern American Social History — 3 Credits

Historical currents of social change and reform in the 20th Century from the latter part of the 19th Century through the "Great Society" era to the current "Voluntarism." Reformist themes bearing on health, welfare, labor, women's suffrage, civil rights movement and recent challenges to traditional American family structures and values against the backdrop of hostile and supportive private groups. Creation of public institutions to meet human needs, such as Social Security. Response of the courts to organized reformist pressures. Contemporary trends suggest major changes after a half century of government intervention in social needs.
3 Class Hours

HIS 190 The World Since 1945 — 3 Credits

An overview of the changing patterns in world affairs since the end of World War II in 1945, For example, emergence of the Third World War, The Cold War, responses to scientific/technological change, insurgent movements attempts at world organization/disarmament, the energy/ecology crisis, the various trouble spots like the Middle East, Panama Canal, Berlin.
3 Class Hours
Prerequisite: HIS 100 The Rise of the West or HIS 131 United States History II or HIS 115 Modern Global History

Short Modules (HIS 200-295)

The department offers special short modules of courses that carry one credit each. These deal with concentrated topics in history and are less than one semester in length. For example, modules have been given in "The Great Man in History" series focusing on Adolf Hitler, Fidel Castro, Charles Darwin and Chairman Mao Tse-tung, each covering a 5-week period.

HIS 200 Series - Great Figures in History — 1 Credit

Examining the advantages and disadvantages of using a biographical approach to the study of a particular period in history. In analyzing a "great figure," the student studies the interconnections between the actions of a great person, the role of chance and pressures of major social forces in shaping the course of human history.

HIS 299 Independent Study — 1-3 Credits

An independent student project which is beyond the scope of courses currently offered by the department, directed by a faculty member with approval of the department chairperson. Independent study does not satisfy the Liberal Arts requirement in history, and it may not be taken in lieu of a 100-series course.
Prerequisite: HIS 100 The Rise of the West or HIS 115 Modern Global History

HOTEL AND RESTAURANT MANAGEMENT

TAE 101 Principles and Practice of Food Service — 3 Credits

The course covers food theory with demonstrations and practical laboratory work. An introduction to various foods and instruction in production and preparation techniques.
3 Class Hours

TAE 103 Front Office Management — 3 Credits

A study OF the structure of the front office operation as it relates to the hotel/restaurant organization: guest service, reservation and rooming procedures, rate structure, cashiering, billing and night audit principles.
3 Class Hours

TAE 206 Housekeeping and Property Management — 3 Credits

A study of the organization, function and responsibilities of the executive housekeeper and chief engineer, Topics include methods of interior design and maintenance; purchase, care and control of furnishings equipment and supplies; system of preventive maintenance and energy control; essential reports and inventories.
3 Class Hours

TAE 207 Hospitatity Principles — 3 Credits

Mini topics in hospitality including table side service, hostess skills, safety and aid for choking, sanitation and health codes, wine tasting, and wine association.
3 Class Hours

TAE 208 Hotel and Restaurant Law — 3 Credits

A study of the laws affecting hotel and restaurant operations. Topics include: common law of innkeeping, food and beverage regulations, liabilities for safety and security of guests and others and their property.
3 Class Hours

TAE 212 Hotel Marketing — 3 Credits

Traces the growth and development of the lodging industry from early times to modern hotel and motel operations. Covers the application of marketing to site location, customer demand and determination of operational needs. Includes design and layout, front office requirements, maintenance, equipment and housekeeping activities.
3 Class Hours

TAE 242 Sales Promotion and Convention Service — 3 Credits

A study of the basic principles and procedures of hotel and restaurant sales promotion and group business. The following areas will be covered; marketing planning; sales promotion techniques and resources, advertising, publicity, public relations and the coordinating and servicing of group businesses.
3 Class Hours

TAE 256 Banquets and Catering — 3 Credits

The course is a laboratory/lecture course in which teams of students will be given practice, under supervision, in planning, ordering, and executing complete menus for specific groups of diners. This course is an elaboration of the techniques of food preparation (practicing using various types of products). The art of the cold buffet as prepared by the Grade-Manager and decoration of foods and a-la-carte service for small and large groups.
3 Class Hours

TAE 265 Food, Beverage, and Labor Costs — 3 Credits

A study of the principles of cost controls essential to an effective hotel and restaurant operation through an application of food, beverage and labor control procedures.
3 Class Hours

TAE 297 Restaurant Internship I — 3 Credits

Career-related employment in area restaurants for the beginning student in the Restaurant/Hotel Technology program. Interns train and work front and back room operations to become familiar with the demands of the industry.

TAE 298 Restaurant Internship II — 3 Credits

Career-related employment in the area restaurants for the student completing the degree in Restaurant Management. The intern will experience the opportunity to apply the theory learned in the program within the setting of restaurants.

TAE 299 Hotel Internship — 3 Credits

Career related employment in area hotels for students in the hotel management program. The intern will experience the opportunity to apply the theory learned in the classroom within the hotel setting.

HUMAN DEVELOPMENT COURSES

Across the nation students have indicated that they want the opportunity in college to identify, pursue and accomplish personal goals, to develop healthier self-concepts, to develop more effective levels of self-understanding and to become open human beings who can build trusting relationships with others. The student affairs course can be one means of facilitating humanistic objectives being espoused by "new" college students.

SAC 101 The Individual in a Changing Environment — 3 Credits

Individual interaction and reading designed to foster understanding and application of psychological and emotional growth within the many environments we are part of. Basic class material is the individual and group analysis of student's experience within an immediate unstructured setting. Focus on analysis and organization of experience into a personally rewarding conception of growth. Individual self-development projects outside the class.
3 Class Hours

SAC 110 Orientation for International Students — 2 Credits

An orientation course for international students designed to aid in their adjustment as students at Broome Community College. Study skills, academic regulations, the American educational system, individual educational and vocational goals, American customs. Especially intended for students during their initial semester of enrollment in conjunction with
English-as-a-Second-Language course offerings, such as ESL 103, 104, 105. (This course is not acceptable for credits toward a degree.)
2 Class Hours

SAC 250 Career Exploration — 3 Credits

How to plan, establish, change a career. The process of deciding on a career and implementing career goals, assessment of values, interests and skills plus their relationship to occupations. Analysis of the labor market needs, identification of employers and sources of occupation information, the means of securing employment through proposals, resumes, applications and job interviews. Supportive small group atmosphere. Class activities include discussion, speakers, testing, and individual counseling within career development theory.
3 Class Hours

SAC 251 Career Search — 1 Credit

For people who know their interests, skills, and values but are not sure which career field or life styles would be most satisfying to them. Sources of occupational information, analysis of labor market needs, what colleges and college majors best prepare students for their career goals. For students who are beginning a career, changing careers, or returning to the job market. For students who scored 13-18 on My Vocational Situation. Supportive small group atmosphere. Discussion sessions, speakers, testing field work, and individual counseling.
2 Seminar Hours

SAC 295 Seminar in Human Potential — 3 Credits

Human potential seminar centers on the person within a positive group setting while working on and with the potential of all involved. It assists persons in achieving the following: becoming more self-direct, self-motivating, self-aware, self-controlled, self-disciplined and empathetic towards others. The focus is on the person's own resources by utilizing specific and structured procedures.
3 Class Hours

INTERIOR DESIGN

INT 101 History of Architecture - Exterior and Interior — 3 Credits

Survey of exterior and interior architectural styles from Ancient Egyptian through 20th Century
3 Class Hours

INT 110 Interior Design I — 3 Credits

The studio interior design course requires the student to become well acquainted with the impact of the designed physical environment on individuals. Practical, aesthetic and psychological aspects of the built environment are addressed. Skills including conceptualizing in three dimensions, drawing in scale and presentation techniques both graphic and oral are developed. Contemporary aspects of design practice and America's influential architects, designers, journalists, and manufacturers will be investigated. Basic design elements will be applied to building design with emphasis on the interior and the relationship of the built environment to the natural.
2 Class Hours, 4 Studio Hours
Prerequisite: Introduction to Design
Recommended: CIV 159 Architectural Drafting I and ART 101 History of Western Art

INT 111 Interior Design II — 3 Credits

To build and develop further the techniques acquired in Interior Design 110. Emphasis will be placed on conceptual analysis of space, aesthetic and functional. The student will be expected to work with the interior environment as a place that nurtures and sustains the human spirit. Sensitivity to the existing architecture of the building as well as awareness of the activities that must be accommodated will be essential in order to develop a workable and convincing solution to each project, residential and commercial.
2 Class Hours, 4 Studio Hours.
Prerequisite: INT 110 Interior Design I

INT 120 Construction and Workroom Technique I — 2 Credits

Study of processes, manufacture and installation of interior design products.
2 Class Hours

INT 121 Specification Writing for Interior Designers — 2 Credits

Techniques used in writing specifications for interior design projects.
2 Class Hours, 1 Studio Hour

INT 140 Fabric Analysis — 2 Credits

History of textile forms and use, weaving techniques, pre-industrial and industrial as well as fiber properties, natural and man-made, are explored. Appropriate selection of textiles for interior use is stressed.
2 Class Hours

ITALIAN

PLACEMENT IN LANGUAGE - Generally one year of high school foreign language is equivalent to one semester in college. Students with two years of a language in high school should register for immediate level courses.

ITA 101, 102 Beginning Italian — 4, 4 Credits

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Reading and discussion of graded literary and cultural texts.
4 Class Hours
Prerequisite: ITA 101 Beginning Italian for ITA 102

ITA 201 Intermediate Italian I — 3 Credits

Comprehensive review of grammar and structure of the language. Intensive reading of literary works as a basis for topics of conversation in Italian in the classroom. Emphasis on aural comprehension and oral practice in classroom.
3 Class Hours
Prerequisite: ITA 102 Beginning Italian

ITA 202 Intermediate Italian II — 3 Credits

Intensive reading of literary works of recognized authors as a basis for topics of conversation in Italian in the classroom.
3 Class Hours
Prerequisite: ITA 201 Intermediate Italian I

ITA 299 Independent Study: Italian — 1-3 Credits

An individualized student project concerned with advanced work in specific area of Italian. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: 3 semester hours of college level work in Italian

LITERATURE

The Department of English recommends that students complete a composition program before taking literature courses.

LIT 210 Studies in United States Literature I — 3 Credits

History and development of United States literature from colonial period to late 19th Century. Emphasis on several major writers of the period.
3 Class Hours

LIT 211 Studies in United States Literature II — 3 Credits

History and development of United States literature from late 19th Century to the present. Emphasis on several major writers of the period.
3 Class Hours

LIT 240 The Poetic Experience: Sight and Sound — 3 Credits

An exploration of the different modes and moods of poetic expression. A thematic and structural approach to poetry as a total experience.
3 Class Hours

LIT 214 Studies in British Literature I — 3 Credits

History and development of British literature from the Middle Ages to the 18th Century. Selections of literary merit from prose, drama, poetry.
3 Class Hours

LIT 215 Studies in British Literature II — 3 Credits

History and development of British literature from the beginning of the 18th Century to the middle of the 20th.
3 Class Hours

LIT 220 The World of the Short Story — 3 Credits

An examination of the development of American, British and Continental short stories. Emphasis on theme and structure.
3 Class Hours

LIT 230 American Drama — 3 Credits

Studies in dramatic theories, techniques and thematic problems of the American drama. (Students taking this course may also be interested in THR 101 Fine Arts: Introduction to Theatre and THR 111 Acting).
3 Class Hours

LIT 233 World Drama — 3 Credits

Studies in dramatic theories, techniques and thematic relationships of the world drama. (Students taking this course may also be interested in THR 101 Fine Arts: Introduction to Theatre and THR 111 Acting.)

LIT 235 Tragic and Comic Vision of Shakespeare — 3 Credits

Shakespeare as both dramatist and poet. Emphasis on selected comedies, histories, tragedies.
3 Class Hours

LIT 250 Portraits of Women: Searching for Understanding — 3 Credits

An in-depth examination of what it means to be a woman as presented by representative literary artists, both women and men, in critically acclaimed pieces of literature. Emphasis on 19th and 20th Century material.
3 Class Hours

LIT 253 Psychological Investigation in Literature — 3 Credits

The application of Jungian, Fruedian and other psychological theories and insights to selected short stories, novels, and poems to promote more penetrating appreciation of character's motivations and actions and the literary work in general.
3 Class Hours

LIT 255 Modern Existential Literature — 3 Credits

An investigation of the themes of alienation and the absurd in selected prose and poetry to shed light on man's current existential crisis.
3 Class Hours

LIT 257 Heritage of Modern Literature — 3 Credits

An attempt to define modern literature as an embodiment and development of antique themes and traditions through the comparative study of the epic, the novel and related genre.
3 Class Hours

LIT 260 Detective Fiction — 3 Credits

A critical study of one of the most popular literary forms of our time, designed for armchair detectives. Starting with Poe, Conan Doyle (Sherlock Holmes) and other classics in the field, the course traces the development of the detective story from its puzzle-solving beginnings to the modern psychological novel of crime and detection.
3 Class Hours

LIT 263 Children's Literature — 3 Credits

Children's literature with introduction to the variety of books available today and development of standards for evaluating them. Prime concern is to help the student use the literature with children creatively, recognizing the importance of language arts, communication and listening skills in cognitive development.
3 Class Hours

LIT 265 Biblical Literature — 3 Credits

An acquisition of the skills necessary to study the Bible. Emphasis on the Biblical narrative and its relationship to Western culture through reading and analysis.

LIT 268 Fantasy and the Anti-Story — 3 Credits

An overview of two popular literary types: fantasy and anti-story. History of these types, with focus mainly on 20th Century development as the types have matured. Students read non-realistic fiction.
3 Class Hours

LIT 269 Prison Literature — 3 Credits

An examination of the prison experience through a variety of readings in prose and poetry focusing on man's continuing struggle tto understand this social phenomenon.
3 Class Hours

MATHEMATICS

MAT 090 Basic Mathematics Review (Formerly MAT 003) — 0 Credits

Basic Mathematics Review is designed to give the student proficiency in elementary mathematics and provide a firm foundation for credit courses. It consists of three units allowing each department to select the units needed as prerequisites for its courses or grams.
3 Class Hours

A. Arithmetic and Introduction to Algebra
Arithmetic of whole numbers, fractions and decimals. Percent, measurement, metric units, ratio and proportion. Language of algebra, arithmetic of signed numbers, solving simple equations. Problem solving.

B. Elementary Algebra
Addition, subtraction, multiplication, division and simplification of algebraic expressions. Graphing. Solving linear equations and inequalities in two variables.
Prerequisite: Basic Mathematics Review A

C. Geometry and Introduction to Trigonometry
Properties and measurements of angles. Similar and congruent triangles, polygons and circles. Perimeter, area and volume measurements. Use of trigonometric ratios to solve right triangle problems.
Prerequisite: Basic Mathematics Review B

D. Metric Conversions and Dosage Computation
Common fractions and decimal fractions. Percentages, ratios and proportions.Metric computations. Apothecary systems. Apothecary, metric and household conversions. Calculation of dosages. Designed to meet the mathematics proficiency required for clinical nursing course.
Prerequisite: Basic Mathematics Review B

Basic Mathematics Review is typically available in both a traditional lecture format or as a self-paced course. Students in the self-paced course use audio-visual aids with a self-study manual, and they work individually with the instructor.

NOTE: MAT 090 has strict requirements, whereby students may be deregistered from the class for poor attendance. This deregistration may result in a loss of financial aid. Consult course outline and/or instructor for further details.

A complete sequence of Basic Math Review would begin with the first section of Arithmetic and Introduction to Algebra and end with the last section of Geometry and Introduction to Trigonometry. But few students study the entire sequence. In the self-study sections, the entry point in the sequence is determined by a placement test. This exit point is usually determined by the student's program requirements. All units are available in every scheduled section.
This course not applicable toward any degrees.

MAT 104 Basic Technical Mathematics — 5 Credits*

Basic Arithmetic operations - Applied Geometry, basic Algebraic operations, Linear equations, graphing, factoring,. Algebraic fractions, systems of linear equations, exponents and scientific notation, roots and radicals, quadratic equations. Trigonometric functions and graphs, solving right triangles, Laws of Sines, Law of Cosines. Designed to prepare technical students to enter MAT 139 Algebra and PHY 100 Preparatory Physics.
5 Class Hours *(Credit applies only to a certificate program, credit does NOT apply to any degree program.)

MAT 113 Mathematics: A Liberal Art I — 3 Credits

An introduction to the variety and structural beauty of mathematics. Topics include: inductive and deductive reasoning, games and sequences, functions and their graphs, combinations, permutations, elementary probability, statistics, statistical graphs, misleading used of statistics. Computer applications will support some of the topics. For Liberal Arts students: recommended for Fine Arts or Humanities majors; not for Science majors.
Prerequisite: MAT 090A Basic Mathematics Review

MAT 114 Mathematics: A Liberal Art II — 3 Credits

An introduction to the variety and structural beauty of mathematics. Topics include: large numbers, exponents and logarithms, symmetry in two and three dimensional figures, mathematical curves in nature and science, networks, trees, topology and mathematics of finance. Computer applications will support some of the topics. For Liberal Arts students: recommended for Fine Art or Humanities majors; not for Science majors.
Prerequisite: MAT 090A Basic Mathematics Review or equivalent.

MAT 117 Elementary Finite Mathematics with Algebra — 4 Credits

Sets, probability, matrix algebra, graphing, inequalities, linear programming, permutations and combinations, linear models of equilibrium, systems of linear equations, solving equations and inequalities.(Student may not use both MAT 145 and MAT 117 to meet graduation requirements.)
4 Class Hours
Prerequisite: MAT 090B Basic Mathematics Review or equivalent

MAT 119 Modern Basic Mathematics I (Formerly MAT 131) — 3 Credits

Algebra of propositions. Algebra of sets. Systems of numeration other than base ten. Properties of the operations of addition and multiplication for the sets of whole numbers integers and rational numbers. In troduction to number theory. For Liberal and General Studies Students; recommended for elementary education majors.
3 Class Hours
Prerequisite: MAT 090B Basic Mathematics Review or equivalent

MAT 120 Modern Basic Mathematics II — 3 Credits

Real number systems, other mathematical systems. Informal geometry, congruence, measurement of areas and volumes, basic constructions. Coordinate geometry, lines, circles, equations. Inequalities and linear programming. Simple and conditional probability. Introduction to statistics.
3 Class Hours
Prerequisite: MAT 119 Modern Basic Mathematics I or MAT 090C Basic Mathematics Review or equivalent

MAT 124 Statistics (Formerly MAT 114) — 3 Credits

Descriptive statistics, organization and presentation of data, measures of central tendency. Variance, standard deviation, binomial distribution, statistical interference. Random sampling, hypothesis testing, confidence intervals, normal distribution, analysis of variance. Chi-square distribution, students t-distrubtion, correlation and regression. (Students may not use both MAT 124 and MAT 125 to meet graduation requirements.)
3 Class Hours
Prerequisite: MAT 090B Basic Mathematics Review or equivalent

MAT 125 Statistics I Using Computers — 3 Credits

Introducing the computer language MINITAB to analyze descriptive statistics, organization and presentation of data, measures of central tendency, standard deviation, binomial distribution, statistical interference, random sampling, hypothesis testing, confidence intervals, normal distribution, Chi-square distribution, student's t-distribution, correlation and regression. (Students may not use both MAT 124 and MAT 125 to meet graduation requirements.)
3 Class Hours, 1 Laboratory Hour
Prerequisite: MAT 090B Basic Mathematics Review

MAT 139 Algebra — 4 Credits

Real and complex numbers, algebraic operations, functions and graphs, exponents and logarithms, linear and quadratic equations, systems of linear equations, linear inequalities, the binomial theorem, matrices and determinants.
4 Class Hours
Prerequisite: MAT 090B Basic Mathematics Review or equivalent

MAT 140 Trigonometry — 4 Credits

Trigonometric functions and their graphs, solutions of triangles, trigonometric identities and equations, inverse trigonometric functions, position vectors, polar representation of complex numbers. DeMoivre's theorem.
4 Class Hours
Prerequisite: MAT 139 Algebra or equivalent

MAT 145 Finite Mathematics (Formerly MAT 121) — 3 Credits

Boolean Logic, matrices, linear programming, simplex game theory, graphs, networks, application of networks and graphs. (Students may not use both MAT 145 and MAT 117 to meet graduation requirements.)
3 Class Hours
Prerequisite: MAT 139 Algebra or equivalent

MAT 146 Introduction to Calculus — 3 Credits

Analytic geometry of line, circle and parabola. Functions and their graphs. Limits and continuity, differential - rules and applications, integration techniques and applications. Exponential and logarithmic functions and applications. Recommended for social science, health science and business students. Not for math majors or science majors in the A.S. degree program. (Formerly MAT 122).
3 Class Hours
Prerequisite: MAT 139 Algebra or equivalent

MAT 152 Mathematics for Computer Studies — 4 Credits

Topics from mathematics needed to understand the operational and use of the digital computer. Logic and truth tables, algebra of sets, relations, equivalence relations, partitions, functions. Vectors, matrices, matrix algebra, determinants. Systems of linear equations, linear programming. Guassian elimination. Fundamental principles of counting, binomia coefficients, permutations, combinations, probability, conditional probability, Graph theory, connectivity, trees, rooted trees, directed graphs; finite state machines, strings.
4 Class Hours
Prerequisite: MAT 139 Algebra

MAT 161 Pre-Calculus (Replaces MAT 141) — 4 Credits

A review of algebra and trigonometry emphasizing computational skills. Algebraic operations, functions, graphs, exponents, logarithms, linear equations, inequalities, determinants. quadratic equations. Trigonometry, solutions or triangles, trigonometric graphs. Complex numbers and vectors.
Prerequisite: Completion of a course in Algebra and Trigonometry or placement by advisor

MAT 162 Applied Calculus I (Formerly MAT 142) — 4 Credits

Basic analytic geometry, distance, equations of lines. Limits, continuity and the derivative. Differentiation of polynomials, maxima and minima. Differentials and approximation, applications in kinematics and circuits. The definite integral and applications to finding area, center of gravity, volume of revolution, work done. Approximate integration, differentiating products and quotients, implicit differentiation and related rates, differentiation and integration of logarithmic, exponential, trigonometric and inverse trigonometric functions.
4 Class Hours
Prerequisite: MAT 161 Pre-Calculus or equivalent

MAT 181 Calculus I with Analytic Geometry — 4 Credits

A university-parallel calculus course covering equations of lines, functions, limits and continuity. Differentiation of algrebraic and trigonometric functions with applications including curve sketching, rectilinear motion, related rates, maxima and minima. Summation, integration and the fundamental theorem of calculus. Applications of the definite integral including area, volume, arc length, surface area and work.
4 Class Hours
Prerequisite: MAT 161 Pre-Calculus Mathematics, or equivalent

MAT 182 Calculus II with Analytic Geometry — 4 Credits

Differential and integration of logrithmic, exponential, hyperbolic functions, inverse trigonometric, inverse hyperbolic functions and parametric expressions. Techniques of integration including integration by parts, partial fractions and trigonometric substitution. Improper integrals, indeterminate forms and L'Hopitals rule. Infinite series and convergence testing. The Polar Coordinate System and its applications. Vectors in two and three dimensions. Unit tangents and normals. Lines in three space. Dot and cross product. Sequences, lines, test for convergence of a series.
4 Class Hours
Prerequisite: MAT 181 Calculus I with Analytic Geometry

MAT 250 Discrete Mathematics — 4 Credits

Sets, functions, proof techniques, relations, partially ordered sets, order isomorphisms, combinatorics including permutations, combinations, the pigeonhole principle, binomial and multinomial coefficients, recurrence relations, generation functions, the principles of inclusion-exclusion, graph theory including paths and connectedness, Eulerian and Hamiltonian graphs, graph isomorphisms, trees, binary search trees and Huffman codes, minimum spanning trees, directed graphs and networks and finite state machines.
4 Class Hours
Prerequisite: MAT 182 Calculus II with Analytic Geometry, PHI 202 Logic and ability to program in Fortran or Pascal.

MAT 252 Introduction to Numerical Analysis — 4 Credits

Computer techniques for the modeling and solutions of problems in numerical analysis. Error analysis, roots of equations, linear and non-linear systems of equations, calculus of finite differences, numerical integration, curve fitting, numerical solution of ordinary differential equations. The computer language Pascal is used.
4 Class Hours
Prerequisite: MAT 182 Calculus II with Analytic Geometry and ability to program in Pascal or Fortran

MAT 264 Linear Algebra — 4 Credits

Linear equations and matrices, real vector spaces, the algebra of linear transformations and matrices, determinants, eigenvalues and eigenvectors.
4 Class Hours
Prequisite: MAT 182 Calculus II with Analytic Geometry

MAT 266 Introduction to Higher Mathematics — 3 Credits

Exposure to basic mathematical methods and concepts. Sets, sequences, mapping, convergence. Preparation for analysis, topology and modern algebra. Recommended for Mathematics majors, Computer students and Engineering Science students, as advised.
4 Class Hours
Prerequisite or Corequisite: MAT 281 Calculus III with Analytic Geometry or permission of instructor

MAT 281 Calculus III with Analytic Geometry — 4 Credits

Power series, radius of convergence. Conic sections and rotation of axes. Partial differentiation, directional derivatives, gradients, maxima and minima. Volume and other applications done by multiple integrals. Introduction to first order differential equations.
4 Class Hours
Prerequisite: MAT 182 Calculus II with Analytic Geometry

MAT 282 Differential Equations with Linear Algebra — 4 Credits

First order differential equations. Matrices, determinants and solutions of systems of linear equations. Vector spaces, Wronskians, linear transformations and differential operations. Characteristic values and vectors, real symmetric matrices, functions of matrices. Homogenous and nonhomogeneous linear differential equations with constant coefficients, undetermined coefficients and variations of parameters. Matrix formulation of linear systems of differential equations and solution by characteristic values, the exponential matrix function, nonhomogeneous linear systems, LaPlace transforms and power series solutions.
4 Class Hours
Prerequisite: MAT 281 Calculus III with Analytic Geometry

MAT 299 Independent Study — 1-4 Credits

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving work assignment.
Prerequisite: Department Chairperson Permission

MECHANICAL ENGINEERING TECHNOLOGY

MET 110 Introduction to Technologies — 1/2 Credit

Familiiarization with College policies and services, department policies and services, the curriculum and career/transfer possibilities. Development of basic technical skills including use of hand-held calculators and computers.
1 Class Hour

MET 113 Engineering Drawing I — 2 Credits

An introductory course in the fundamentals of engineering drawing. Topics include lettering, geometric construction, basic dimensioning, sectioning, auxiliary views, sketching & shape description, and revolutions.

MET 116 Engineering Drawing II with CAD — 2 Credits

A continued study in engineering drawing with an introduction to a CAD System. Selected topics to include assembly drawings, fits and tolerances, descriptive geometry along with an introduction to CAD.
Prerequisite: MET 113 Engineering Drawing I

MET 121 Manufacturing Processes I — 3 Credits

A basic study of manufacturing materials and processes, such as casting metal, production of ferrous and non-ferrous metals and shape changing processes of hot and cold working techniques. Oxyacetylene, arc resistance welding. Machine tool operation, instrumentation and measurement.
2 Class Hours, 2 Laboratory Hours

MET 122 Manufacturing Processes II — 2 Credits

Abrasives and grinding, indexing, gearing, special machining processes such as numerical control and electrical discharge machining. Advanced elements of machine tool operation including the use of grinding machines, turret lathe, honing, lapping.
1 Class Hour, 3 Laboratory Hours
Prerequisite: MET 121 Manufacturing Processes I

MET 125 Programming Numerical Control Machine Tools — 2 Credits

Rectangular coordinate system, point to point and continuous path programming, reading and preparation of perforated tape and actual programming of certain numerical control equipment. Computer assisted programming and the relationship of group technology will be discussed.
2 Class Hours
Prerequisites: MAT 139 Algebra or equivalent and MET 122 Manufacturing Processes II or instructor's approval.

MET 132 Applied Mechanics — 4 Credits

STATICS: Free body diagram, trusses, friction, centroids, moments of inertia.

DYNAMICS: Motion of particles and bodies without consideration of the forces required to produce or maintain motion (Kinematics), unbalanced forces and the motion they produce (kinetics), work and energy, impulse and momentum.
4 Class Hours
Prerequisite: PHY 141 Physics and MAT 161 Precalculus or equivalent or department chairperson approval.

MET 223 Manufacturing Processes III — 2 Credits

Further experience with indexing, spiral work, cams, cyndrical grinding.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MET 122 Manufacturing Processes II

MET 235 Strength of Materials — 3 Credits

Normal and shear stress and strain, elastic and plastic deformation, torsion, stress in thin-walled cylinders, joints, shear force and bending moment in beams, beam stresses, beam deflection, multi-directional plane stress.
2 Class Hours, 3 Laboratory Hours
Prerequisite: MET 132 Applied Mechanics

MET 238 Mechanical Design — 4 Credits

An analysis of machine motion and the design of machine elements. Analysis of motion of linkages and mechanisms for displacement, velocity and acceleration relationships. Design and analysis of weldments, fasteners, springs, power screws, couplings, shafts, clutches, gears and bearings.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MET 235 Strength of Materials and CAD 200 Introduction to Computer Graphics or CAD 211 Basic Mechanical Design

MET 243 Fluid Mechanics — 3 Credits

The study of fluid statics and dynamics. Topics include fluid forces, flow measurement, the steady flow energy equation, viscosity, laminar and turbulent flow, frictional losses, pipeline systems, drag and lift, and open channel flow.
2 Class Hours, 3 Laboratory Hours
Prerequisite: MET 132 Applied Mechanics

MET 244 Thermodynamics — 3 Credits

A study of the property and energy relationships in non-flow and steady flow applications. Topics include ideal gas relationships, real working substances, the first and second law of thermodynamics, thermodynamic cycles, and available energy. The cycle concept is applied to steam power, internal combustion engines, gas turbines, refrigeration and heat pumps. Consideration is also given to combustion analysis, nuclear energy and heat transfer.
2 Class Hours, 3 Laboratory Hours
Prerequisite: PHY 142 Physics II

MET 246 Refrigeration and Air Conditioning — 3 Credits

Energy transfer systems and controls used for cooling an environment below the temperature of its surroundings. Air and humidity calculations, heat transfer and transmission coefficients, heating loads, distribution systems, refrigeration systems, cooling load and air conditioning calculations, controls and control systems.
3 Class Hours
Prerequisite: MET 243 Fluid Mechanics
Corequisite: MET 244 Thermodynamics

MET 248 Fluid Power — 3 Credits

Static and dynamic fluid force systems used for both actuation and control of mechanical devices. Application of frequently used fluid power components and circuits.
3 Class Hours
Prerequisite: MET 243 Fluid Mechanics and MET 244 Thermodynamics

MET 252 Engineering Materials and Industrial Processes — 4 Credits

Properties, applications and processing of engineering materials including metallic, non-metallic and composite materials.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MET 121 Manufacturing Process I and MET 235 Strength of Materials

*MET 253 Engineering Materials and Industrial Processes — 3 Credits

Properties, applications and processing of engineering materials including metallic, non-metallic and composite materials.
2 Class Hours, 2 Laboratory Hours
Prerequisite: MET 121 Manufacturing Processes I and MET 235 Strength of Materials

MET 263 Engineering Statistics and Quality Control — 2 Credits

Introduces measures of the central tendency and dispersion of data. Relates the theories of statistics and probability to the industrial techniques of control charting and acceptance sampling. Emphasizes the concepts of accuracy, precision, and repeatability in engineering measurement. Topics include normal, hypergeometric, binomial, and Poisson distributions; control charts for mean, range, fraction defective, etc.;single, multiple, and continuous sampling; reliability; specifications, tolerances, and measurement.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MAT 161 Precalculus, or MAT 139 Algebra

MET 280 Management Decisions — 2 Credits

Objective criteria and evaluation in making decisions. Currently accepted procedures to conceive management models and systems.
2 Class Hours

*MET 285 Time, Motion and Wage Study — 2 Credits

Analysis of time spent and methods used for industrial tasks. Relations to wage structure on individual and plant-wide basis.
2 Class Hours
Prerequisite: MAT 139 Algebra

*MET 286 Production Control — 2 Credits

Planning, scheduling and routing of goods through a plant from raw materials to finished products. Production control principles, the control of manufacturing processes.
2 Class Hours
Prerequisite: MAT 139 Algebra

MET 287 Plant Layout and Materials Handling — 2 Credits

Plant arrrangement as it influences industrial operations. Assembling data, coordinating operations, developing operational layouts, evaluative arrangements. Materials handling requirements, planning and evaluation.
2 Class Hours
Prerequisite: MAT 139 Algebra

MET 295 Seminar — 1-3 Credits

An opportunity for the interested student to become involved with the process of research, formal paper preparation, formal delivery and defense of ideas presented. Also a critical evaluation of ideas set forth by others.
Prerequisite: As established by the Department Chairperson

MET 299 Independent Study — 2-3 Credits

The student undertakes an independent project in his specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a work assignment.
Prerequisite: Approval of Department Chairperson

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

MEDICAL ASSISTANT

MDA 102 Medical Assisting Science — 2 Credits

Introduction to the profession of medical assisting. Qualifications and duties, professional affiliation, history of medicine, ethics and professionalism, the role of the Medical Assistant. In the physicians office, interactions with patients and staff.
2 Class Hours

MDA 104 Keyboarding and Medical Word Processing — 3 Credits

Introduction to and development of basic keyboarding skills and word processing. Students will have the opportunity to learn keyboarding and word processing functions and apply that knowledge with hands-on development of skills. Emphasis will be on application to medical correspondence, reports, and chart notes. For Health Science students only.
2 Class Hours, 3 Laboratory Hours
Prerequisite: BIO 131 Human Biology and and MRT 105 taken concurrently or consent of instructor

MDA 106 Medical Correspondence and Communications — 2 Credits

Development of correspondence and communication skills. Fundamentals of machine-dictated and written medical reports and correspondence. Patient related communications, such as reception and telephone techniques, message taking and patient information skills. For Medical Assistant students.
2 Laboratory Hours
Prerequisites: MRT 105 Medical Terminology I

MDA 114 Standard First Aid and Personal Safety: Management of Emergencies — 1 Credit

The causes, care and prevention of accident/emergency life-saving situations. Mastery level of learning for the proficiency of basic skills. Certification by American Red Cross. Recognizing, managing and aiding the physician in medical emergencies and maintaining emergency supplies. Professional observer with EMT.
2 Laboratory Hours

MDA 115 Medical Assisting Procedures I — 4 Credits

Basic clinical procedures of medical assisting in the physicians' office. Use and management of diagnostic instruments and equipment. Related patient care, professional ethics, medical terminology nomenclature. For Medical Assistant students.
3 Class Hours, 2 Laboratory Hours
Prerequisite: MRT 105 Medical Terminology or consent of instructor

MDA 201 Medical Assisting Procedures III — 4 Credits

Introduction to basic microbiology, hematology and urinalysis. Collection, preparation and testing of blood, urine and body fluids. Significance of laboratory analysis. For Medical Assistant students.
2 Class Hours, 4 Laboratory Hours
Prerequisite: BIO 132 Human Biology II

MDA 206 Medical Office Management — 4 Credits

Medical office administrative procedures, such as bookkeeping principles and practices, patient health records, insurance forms, banking and postal services, payroll records, patient accounts, office machines. Mechanics of applicable medical correspondence. Appointment scheduling, supplies and inventory. Emphasis on practical application of administrative techniques. For Medical Assistant students.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MDA 102 Medical Assisting Science and MDA 106 Medical Correspondence and Communications

MDA 208 Medical Ethics, Law and Economics. — 3 Credits

Emphasizing the medical ethics which set the standards of conduct for physicians, as well as guidelines for medical assistants. Requirements to practice medicine, legal liabilities of the profession, and the importance of medicolegal consent forms. Legal arrangements of private medical practices, medical care financing, and systems of health care delivery.
3 Class Hours

MDA 210 Pharmacology — 2 Credits

A practical course relevant to health sciences courses. Emphasizes knowledge of prescriptions and prescription writing. Basic principles of mathematics in pharmacy. Drugs governed by U.S.P. standards which are in common use and the generic-pharmaceutical relationship. Drug grouping action in relation to human physiology. For Medical Assistant, and Health Science students.
2 Class Hours
Prerequisite: BIO 132 Human Biology II or consent of instructor

MDA 211 Medical Assisting Procedures II — 4 Credits

Advanced technical procedures in medical assisting specifically oriented to the various medical specialties. Techniques of electrocardiography, audiometry and physical therapy. Field trips and practical experiences give additional background outside of the classroom. For Medical Assistant students. (It is strongly recommended that this course be taken the semester prior to MDA 245 Directed Practice.)

2 Class Hours, 4 Laboratory Hours

Prerequisite: BIO 132 Human Biology II and MDA 115 Medical Assisting Procedures I

MDA 245 Directed Practice — 5 Credits

Directed practical experience as an extern in physician's offices, medical centers, school health departments, rehabilitation clinics, and other health care facilities, weekly seminar. For senior Medical Assistant students who must have a 2.0 overall average.

1 Class Hour, 16 Laboratory Hours

Prerequisite: MDA 206 Medical Office Management and MDA 211 Medical Assisting Procedures II, MDA 201 Medical Assisting Procedures III and MDA 210 Pharmacology must be taken previously or concurrently

MEDICAL LABORATORY TECHNOLOGY

MLT 110 Introduction to Medical Laboratory Technology — 1 Credit

Overview of the field of Medical Technology. Designed to acquaint the student with six areas of a clinical laboratory and with the professional role of the technologist/technician in that setting. Discussions will include the variety of opportunities open to those entering the field.

1 Class Hour

MLT 201 Hematology and Coagulation — 3 Credits

Comprehensive study of the hemopoietic and hemostatic systems. The normal physiology and classic pathology of both systems. Emphasis is on the mechanics and interpretation of routine and special test procedures.

3 Weeks: 2 Class Hours, 4 Laboratory Hours per day

Prerequisite: Freshman Year in Medical Laboratory Technology or approval of MLT advisor

MLT 201P Hematology and Coagulation Practicum — 3 Credits

Clinical experience in the hematology laboratory of an affiliated hospital. Designed for observation and development of technical skills needed to perform in a hematology/coagulation laboratory.

3 Weeks: 30 Hours per week of practicum

Prerequisite: MLT 201 Hematology and Coagulation

MLT 202 Urinalysis/Body Fluids — 1 Credit

Study of the Psychiological processes which result in the formation of urine and body fluids. Emphasis on analysis of fluids and interpretation of test results.

1 Week: 2 Class Hours, 4 Laboratory Hours per day

Prerequisite: Freshmen Year of Medical Laboratory Technology or permission of MLT advisor.

MLT 202P Urinalysis/Body Fluids Practicum — 1 Credit

Clinical experience in the Urinalysis/Body Fluid area of an affiliated hospital. Designed to give students experience and competence in performing standard laboratory techniques.

1 Week: 40 Hours of Practicum

Prerequisite: MLT 202 Urinalysis/Body Fluids

MLT 203 Microbiology — 6 Credits

Survey of the microbial world, from taxonomy, morphology, and structure to metabolism, genetics, and growth characteristics of microbes. Emphasis in the latter part of course on the isolation and identification of medically important microbes.

5 Weeks: 3 Class Hours, 3 Laboratory Hours per day

Prerequisite: Freshman Year Medical Laboratory Technology or MLT advisor

MLT 203P Microbiology Practicum — 2 Credits

Clinical experience in the Microbiology area of an affiliated hospital. Students gain competence in diagnostic techniques used in the growth and identification of medically important microbes.

2 Weeks: 40 Hours per week

Prerequisite: MLT 203 Microbiology

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

MLT 204 Phlebotomy — 1 Credit

Training and experience in the practice of phlebotomy, teaching students to recognize and use blood collection equipment, isolation techniques and precautions, and perform procedures of routine venipuncture and skin puncture. Practical experience at affiliated hospitals.

8 Class Hours, 30 Practicum Hours

MLT 205 Immunology — 4 Credits

Study of mechanisms of immune response, including discussions of humoral and cell-mediated immunity, complement, phagocytosis, and the interaction of all systems. Immunodeficiency, autoimmunity, immune proliferation and immunopathology examined in relation and contrast to normal immune function. Laboratory sessions and emphasize testing to determine immune status and diagnose disease.

3 Weeks: 2 Class Hours, 4 Laboratory Hours per day, to include simulated experience.

Prerequisite: Freshmen Year of Medical Laboratory Technology or permission of MLT advisor

MLT 206 Immunohematology — 2 Credits

Introduction to the field of blood banking. Theoretical knowledge of blood groups and blood grouping. component and transfusion therapies, transfusion reactions, and allo- and autoantibody formation. In laboratory sessions the student performs ABO and Rh grouping, antibody identification, and compatibility testing.

2 Weeks: 2 Class Hours, 4 Laboratory Hours per day

Prerequisite: Freshman Year in Medical Laboratory Technology or permission of MLT advisor

MLT 206P Immunology Practicum — 2 Credits

Experience in the Blood Bank of an affiliated hospital. Students perform routing blood bank procedures.

2 Weeks: 35 Hours per week

Prerequisite: MLT 206 Immunohematology

MLT 207 Clinical Chemistry — 5 Credits

Designed to cover the principles and analytical methods of clinical chemistry as performed in the Medical Laboratory. The relationship of physiochemical measurements of body function in health and disease including the renal, liver, digestive and respiratory systems. Emphasis on those chemical tests which evaluate the function of these systems related to metabolism, protein synthesis, pH blood gases, electrolyte balance, enzymes and hormones. Laboratory work includes the theory, operation and maintenance of the specialized and semi- and fully automated analytical instrumentation used to perform these chemical tests.

5 Weeks: 2 Class Hours, 4 Laboratory Hours per day

Prerequisite: Freshmen Year in Medical Laboratory Technology or permission of MLT advisor

MLT 207P Clinical Chemistry Practicum — 3 Credits

Clinical experience in the Chemistry and Special Chemistry areas of an affiliated hospital. Students practice methods learned in MLT 207 Clinical Chemistry to expand their technical skills into a broader range of equipment and more advanced instrumentation

3 Weeks: 35 Hours per week.

Prerequisite: MLT 207 Clinical Chemistry

MLT 299 Independent Study — 1-4 Credits

Course content covering advanced work in Medical Laboratory Technology on which the instructor and student agree. The material is beyond the scope of an ordinary course and it must be approved by the department chairperson. Conducted under the direction of a faculty member.

Prerequisite: Department Approval

MEDICAL RECORD TECHNOLOGY

MRT 101 Medical Record Science I — 2 Credits

Introduction to the history of medicine and the historical development of the health care field, with emphasis on the organizational structure of health institutions. Functions of a medical record department and overview of the professional association. Definition of, standards for, and development of a medical record as to content, format, evaluation and completion. A comprehensive review of the organization of the medical staff. Numbering and filing systems and methods. Storage and retrieval systems.

2 Class Hours

Corequisite: MRT 101L Medical Record Science I Laboratory

MRT 101L Medical Record Science Laboratory 1 Credit

Practical application in the medical record laboratory of the principles described in the lecture mode of this course.
2 Laboratory Hours
Corequisite: MRT 101 Medical Record Science I

MRT 105 Medical Terminology I 2 Credits

Medical terminology as correlated with anatomical systems. Suffixes, prefixes, root words and use of the medical dictionaries. For Medical Assistant and Medical Record Technology students
2 Class Hours

MRT 107 Medical Transcription 2 Credits

Designed to introduce the student to the knowledge and skills required for medical machine transcription in a health care facility. A practical experience in transcribing including proper format and a variety of medical reports.
4 laboratory Hours
Prerequisite: MRT 105 Medical Terminology I

MRT 110 Medical Record Science II 2 Credits

In-depth study of the Tumor Registry. In-depth treatment of basic hospital and vital statistics. A comprehensive review of the organization of the medical staff. Overview of accrediting agencies for health care facilities.
2 Class Hours
Prerequisite: MRT 101 Medical Record Science I and MRT 101 Medical Record Science Lab
Corequisite: MRT 110L Medical Record Science II Lab

MRT 110L Medical Record Science II Laboratory 1 Credit

Applications of the principles learned in the lecture mode of this course.
2 Laboratory Hours
Corequisite: MRT 110 Medical Record Science II

MRT 115 Medical Terminology II 2 Credits

A continuation of MRT 105 Medical Terminology I. Emphasis on terminology associated with the integumentary, musculoskeletal, nervous, special senses, cardiovascular, digestive, respiratory, genito-urinary and endocrine systems.
2 Class Hours
Prerequisite: MRT 105 Medical Terminology I

MRT 144 Directed Practice 4 Credits

Directed summer practical experience in the hospital medical record department. Development of insight and skills into the basic medical record procedures. Graduation requirement.
40 Laboratory Hours per week for 4 Weeks
Prerequisite: MRT 110 Medical Record Science

MRT 202 Medical Record Science III 2 Credits

A study of the purpose of classifying diseases and operations, difference between an historical development of nomenclature and classification systems. In-depth study of ICD-9-CM coding principles. Introduction to the prospective payment system utilizing DRGs. Other nomeclature and classification systems.
2 Class Hours
Prerequisite: MRT 110 Medical Record Science II and BIO 131 and BIO 132 Human Biology
Corequisite: MRT 202L Medical Record Science III Laboratory and BIO 140 Pathopysiology

MRT 202L Medical Record Science III Laboratory 2 Credits

Actual practice of coding medical records and assignments of DRGs.
4 Laboratory Hours
Corequisite: MRT 202 Medical Record Science III

MRT 208 Advanced Medical Transcription 2 Credits

Review of medical terminology emphasizing specialized terminology. Advanced medical transcription techniques through the use of recorded history and physical examinations, discharge summaries, consultation reports, operative reports and outpatient notes.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MRT 107 Medical Transcription

MRT 210 Medical Record Science IV 2 Credits

Principles of management and the role of the supervisor in the medical record department. Developmental and operational phase of health information systems. Trends in health care delivery systems. Overview of ambulatory care, long term care and psychiatric facilities. Introduction to problem Oriented Medical Record System.
2 Class Hours
Prerequisite: MRT 202 Medical Record Science III and MRT 202L Medical Record Science II Laboratory
Corequisite: MRT 210L Medical Record Science IV Laboratory

MRT 210L Medical Record Science IV Laboratory 1 Credit

Practical application of the principles described in the lecture mode of this course.
2 Laboratory Hours
Prerequisite: MRT 110 Medical Record Science II and MRT 144 Directed Practice

MRT 216 Clinical Practicum 1 Credit

Enables the students to utilize the knowledge and skills obtained in the classroom and directed practice assignments. Students perform the functions of an actual medical record department and use the computer assignments. Students perform the functions of an actual medical record department and use the computer terminal, microfilm equipment and medical transcription word processing center.
2 Laboratory Hours
Prerequisite: MRT 110 Medical Record Science and MRT 144 Directed Practice

MRT 222 Medical Legal Aspects 3 Credits

Introduction to legal aspects of medical records. Legal basis for medical practice, confidentiality. Patient's "Bill of Rights," voluntary and involuntary release of medical information. Authorizations and consents, professional liabilities, medical-moral issues such as abortion, euthanasia, sterilization, artificial insemination.
3 Class Hours
Prerequisite: MRT 202 Medical Record Science

MRT 236 Quality Assurance 2 Credits

Three components of medical care evaluation - admission, concurrent review and retrospective review of patient records, audited by the medical record technician, Federal and state regulations.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MRT 110 Medical Record Science

MRT 245 Directed Practice 4 Credits

Directed practice experience in the hospital and related sites. Correlated with MRT 210 Medical Record Science to develop insight and skills into advanced medical record procedures.
16 Laboratory Hours
Prerequisite: MRT 202 Medical Record Science and MRT 144 Directed Practice

MRT 295 Medical Record Seminar 2 Credits

Detailed study and analysis of specific problems encountered in the administration of a medical record department. Correlated with directed clinical practice. Case study and extensive literature review.
2 Class Hours

MUSIC

Mus 101 Introduction to Music 3 Credits

A survey course examining the music of the great composers representing each major period of Music History. How to listen to different forms of music such as symphonies, concertos, opera and jazz will be included in the topics covered. Emphasis on developing listening skills to bring the student to an informed awareness and understanding of great music.
3 Class Hours

MUS 105 Music Theory I 3 Credits

A beginning course in music theory, including basic rudiments of music. Pitch and rhythmic notation, scales and intervals. Ear training through melodic and rhythmic drills and dictation.
3 Class Hours

MUS 106 Music Theory II 3 Credits

Continuation of Music Theory I. Traditional harmony, exercises in melodic, rhythmic and harmonic dictation, aural analysis, beginning composition.
3 Class Hours
Prerequisite: MUS 105 Music Theory I or consent of instructor

MUS 110 17th and 18th Century Music 3 Credits

Music and musical styles of the 17th and 18th Centuries. Emphasis on the composers and their styles and the relationship of music to the social, political and other cultural reforms of the period. (Not offered in 1986-87 academic year.)
3 Class Hours
Prerequisite: MUS 101 Introduction to Music or consent of instructor

MUS 111 19th Century Music — 3 Credits

Important musicians and musical styles of the Romantic Period. Emphasis on developments in piano literature, the symphony orchestra and opera. Listening to selected recordings and attendance at local concerts (Not offered in 1986-87 academic year.)
3 Class Hours
Prerequisite: MUS 101 Introduction to Music or consent of instructor

MUS 112 20th Century Music — 3 Credits

Important musicians and musical styles of the 20th Century. Emphasis on the trends and development of music in America. Leading European composers. (Not offered in 1986-87 academic year.)
3 Class Hours
Prerequisite: MUS 101 Introduction to Music or consent of instructor

MUS 180 Jazz Improvisation — 2 Credits

Basic concepts of soloing in the jazz idiom for instrumentalists. Teach students to interpret chord symbols and understand the sounds that they represent in a meaningful way to create a jazz solo with their instrument. Attendance at jazz concerts required.
4 Studio Hours
Prerequisite: MUS 105 Music Theory I or permission of instructor

MUS 185 Beginning Guitar — 1 Credit

Emphasis on Music Fundamentals, scales, chords, reading rhythms and learning to accompany singers. Students must own their own instruments.
2 Studio Hours

MUS 186 Guitar Ensemble — 1 Credit

Provide students the opportunity to perform music for the guitar in a group setting. Emphasis will be on group and individual playing. The music played will be chosen with respect to the historical literature available.
2 Studio Hours

MUS 187 The Guitar: It's History and Music — 3 Credits

The development of the physical and musical history of the instrument is presented through live performances and recordings. The history of the guitar and its importance relative to composers and performers throughout music history will be identified.

MUS 188 Practical Music Theory for the Performing Musician — 3 Credits

Designed to help the novice performer of music understand key signatures, scales, rhythms, chords, form intervals, transposition, notation and sight reading. Emphasis on fundamentals of music and practical application of what is learned.
3 Class Hours

MUS 190 The College Choir — 1 Credit

Students who sing in the College Choir receive one credit per semester.
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MUS 191 Music Performance — 1 Credit

Students who participate in the recitals or concerts of the academically-associated Broome Community College Music Performance groups receive one credit per semester.

MUS 192 Woodwind Ensemble — 1 Credit
MUS 193 Brass Ensemble — 1 Credit
MUS 194 Voice Class I — 1 Credit

Provides any student the opportunity to learn correct vocal production, breath control, diction, articulation and musical interpretation of art songs. Emphasis is on tonal production and group and individual singing.
2 Studio Hours

MUS 195 Jazz Ensemble — 1 Credit

By audition only.

MUS 196 String Ensemble — 1 Credit

(Not for guitarist).

MUS 197 Applied Music I — 1 Credit

For students in their first semester. To enable instrumental and vocal students to study privately with a teacher and develop their musical performance abilities. Not a course for beginners. A minimum of 15 lessons required per semester. Cost of lessons not included in BCC tuition.
2 Studio Hours

MUS 198 Applied Music II — 1 Credit

Continuation of MUS 197 Applied Music I, for second semester students. A minimum of 15 lessons required per semester and continued musical growth and maturity in solo and ensemble performance is expected. Cost of lessons not included in BCC tuition.
2 Studio Hours
Prerequisite: BUS 197 Applied Music I

MUS 294 Voice Class II — 1 Credit

Continuation of Voice Class I and for students who have performed in high school musicals, chorus and/or those who have studied privately. This is a group situation in which vocal literature appropriate to individual and group singing will be sung.
2 Studio Hours
Prerequisite: MUS 194 Voice Class I or permission of instructor

MUS 297 Applied Music III — 1 Credit

Continuation of MUS 198 Applied Music II, for third semester students.
2 Studio Hours
Prerequisite: MUS 198 Applied Music II

MUS 298 Applied Music IV — 1 Credit

Continuation of MUS 297 Applied Music III, for fourth semester students.
2 Studio Hours
Prerequisite: MUS 297 Applied Music III

MUS 299 Independent Study: Music — 1-3 Credits

An individual student project concerned with advanced work in a specific area of music. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: 3 semester hours of college level work in music.

NURSING

ADN 100 Meeting Basic Human Needs — 4 Credits

In Basic Human Needs, the student is introduced to the conceptual framework upon which the curriculum is designed. Needs, is emphasized. This is the basis for applying the adult life cycle. Biopsychosocial concepts are used to present holistic man within varied cultures. Emphasis is placed on the maintenance of homeostasis based on the wellness/illness continuum. The student is introduced to the basic concepts of pharmacology. Class content and skills learned in nursing skills laboratory are applied during clinical laboratory experiences. ADN 100C runs concurrently with lecture component and successful achievement is required.
4 Class Hours

ADN 100C Meeting Basic Human Needs — 2 Credits

Clinical Component. S/U Grade given.
6 Clinical Hours

ADN 102 Meeting Mobility Needs — 3 Credits

This course focuses on the concepts of immobility, incorporating the nursing process. Maslow's Hierarchy of dysfunction are explored. Perioperative concepts including the psychophysiologic aspects of pain are included. Stages of illness and the physiology of disturbances of body temperature are presented. Autoimmune diseases and their nursing implications are explored. The nursing process is used to correlate class theory, nursing skills prior knowledge of anatomy and physiology. ADN 102C runs concurrently with lecture component and successful achievement is required.
3 Class Hours
Prerequisites: ADN 100 Meeting Basic Human Needs and BIO 131 Human Biology I

ADN 102C Meeting Mobility Needs — 2 Credits

Clinical Component. S/U Grade given.
6 Clinical Hours

ADN 103 Nursing Issues I — 1 Credit

Nursing Issues is designed to explore, in detail, critical thinking, analytical writing, decision making, values clarification and the setting of priorities within the context of ethical, legal and cultural influences impacting on self and the practice of nursing. Assertiveness and management skills will be explored and applied to nursing practice situations. Emphasis will be on personal accountability and the management of multiple patient care situations.
2 Seminar Hours
Prerequisite: ADN 100 Meeting Basic Human Needs

ADN 204 Regulatory Concepts — 3 Credits

This course focuses on the nursing process and Maslow's Hierarchy of Needs across the life cycle. Stress, both physical and non-physical is discussed as how it effects and is effected by human physiology and pathology.

Mechanisms of normal fluid and electrolyte control are presented. The more common disturbances of body fluid and electrolytes are explored as a means of applying the nursing concepts of prevention of client problems, maintenance of existing client strengths and restoration of clients to an optimum level of health. Endocrine function is reviewed and the effects of dysfunction are presented. The nursing skills and knowledge of anatomy and physiology. ADN 204C runs concurrently with lecture component and successful achievement is required.

3 Class Hours

Prerequisites: ADN 102 Meeting Mobility Needs, BIO 132 Human Biology II and Developmental Psych.

ADN 204C Regulatory Concepts — 1 1/2 Credits

Clinical Component. S/U Grade given.

4½ Hours Campus Lab

ADN 205 Psychological Concepts I — 3 Credits

This course will focus on mental health concepts, providing a therapeutic environment and applying the nursing process using Maslow's Hierarchy of Needs. Therapeutic relationships (individual/group) are established in the care of clients with affective and thought disorders. These relationships are based on principles of psychiatric nursing using the wellness-illness continuum as well as communication theory. Class content is applied across the life cycle, incorporate cultural and teaching/learning needs during the student's experience on an in-patient psychiatric unit as well as integrated into all other clinical laboratory experiences. ADN 205C runs concurrently with lecture component and successful achievement is required.

3 Class Hours

Prerequisites: ADN 102 Meeting Mobility Needs, BIO 132 Human Biology II and Developmental Psych

ADN 205C Psychological Concepts I — 1 1/2 Credits

Clinical Component. S/U Grade given.

3 Hours Campus Lab

ADN 206 Concepts of Obstruction and Inflammation — 3 Credits

This course focuses on the concepts of obstruction and inflammation, incorporating the nursing process, Maslow's Hierarchy of Needs and the life cycle. Theories of communicable disease and infection are presented as well as the concepts of autoimmune and allergic responses. The digestive tract is used to illustrate broad concepts of infection, inflammation and obstruction. The physiology of neoplastic growth is explored as its relates to both benign and malignant cells. The nursing process is used to correlate class theory, nursing skills and clinical skills. This course builds on the student's prior knowledge of anatomy and physiology. ADN 206C suns concurrently with lecture component and successful achievement is required.

3 Class Hours

Prerequisites: ADN 204 Regulatory Concepts, ADN 205 Psychological Concepts I and ADN 210 Family Centered Maternity Nursing

ADN 206C Concepts of Obstruction and Inflammation — 1 1/2 Credits

Clinical Component. S/U Grade given.

4½ Clinical Hours

ADN 207 Oxygenation Concepts — 3 Credits

This course focuses on the concept of oxygenation, incorporating the nursing process, Maslow's Hierarchy of Needs and the life cycle. All systems responsible for maintaining adequate systemic oxygen are explored. Also considered is the phenomenon of compensation between body systems. The interrelatedness of stress and the body's demand for oxygen becomes a central theme throughout the course.

Common disruptions in the related systems are presented as a means of establishing the nursing concepts of prevention and restoration of clients to their optimum level of health. The nursing process is used to correlate class theory, nursing skills and clinical skills. This course builds on the student's prior knowledge of anatomy and physiology. ADN 207C runs concurrently with lecture component and successful achievement is required.

3 Class Hours

Prerequisite: ADN 204 Regulatory Concepts, ADN 205 Psychological Concepts I and ADN 210 Family Centered Maternity Nursing

ADN 207C Oxygenation Concepts — 1 1/2 Credits

Clinical Component. S/U Grade given.

4½ Clinical Hours

ADN 208 Psychological Concepts II — 3 Credits

This course will focus on mental health concepts, providing a therapeutic environment and applying the nursing process using Maslow's Hierarchy of Needs. The concepts of therapeutic relationships (individual/group), are applied in the care of clients with neuroses, chemical dependency, social agression and pediatric mental illness/retardation. These relationships are based on principles of psychiatric nursing using the wellness-illness continuum and crisis intervention and communication theories. Additionally, the history of psychiatric nursing and the legal implications regarding the care and rights of psychiatric clients will be incorporating cultural and teaching/learning needs during the student's experiences on an in-patient psychiatric unit as well as integrated into all other clinical laboratory experiences. ADN 208C runs concurrently with lecture component and successful achievement is required.

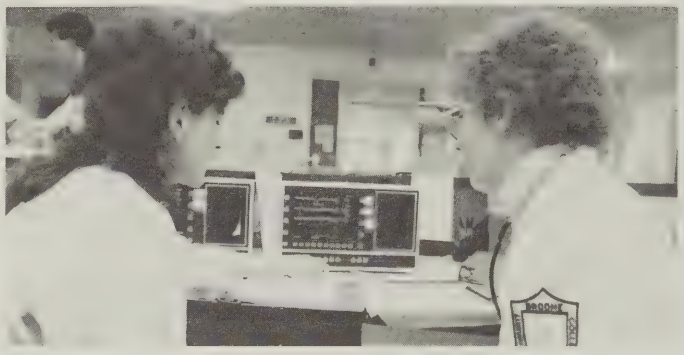
3 Class Hours

Prerequisites: ADN 204 Regulatory Concepts, ADN 205 Psychological Concepts I and ADN 210 Family Centered Maternity Nursing

ADN 208C Psychological Concepts II — 1 1/2 Credits

Clinical Component. S/U Grade given.

3 Hours Campus Lab



ADN 210 Family Centered Maternity Nursing — 3 Credits

The focus of this course is Family Centered Maternity Nursing. The maternal cycle is presented as a developmental task of the young adult, with emphasis on preparation for parenthood, and the experience of labor and delivery as a normal physiological process. The reality of parenthood, and the psychosocial and cultural implications of childbearing on the family and middle aged woman are also considered.

Although the effects of a normal pregnancy on the family are emphasized, selected physical and behavioral problems for the mother and common problems of the newborn are discussed.

Through application of the nursing process using Maslow's Hierarchy of Needs, the student will correlate class, nursing skills and clinical theory and skills. The course builds on the student's prior knowledge of anatomy and physiology.

During clinical practice the student will utilize hospital resources and community services available to aid individuals in their search for an optimum level of wellness. ADN 210 C runs concurrently with lecture component and successful achievement is required.

3 Class Hours

Prerequisites: ADN 102 Meeting Mobility Needs, BIO 132 Human Biology II and Developmental Psych.

ADN 210C Family Centered Maternity Nursing — 1 1/2 Credits

Clinical Component. S/U Grade given.

4½ Hours Campus Lab

ADN 293 Assessment Skills I — 1 Credit

This course is designed to instruct student's basic physical assessment skills. Class content reflects assessment of normal anatomy and physiology, and refers to changes of the human body with disease and aging process. Includes practice lab component.

1 Class Hours

ADN 294 Assessment Skills II — 1 Credit

This course is a continuation from Assessment Skills I Class content will reflect physical assessment of normal and physiology of the human body systems not incorporate in Assessment Skills I. Includes practice lab component.

1 Class Hour

ADN 297 Nursing Seminar II — 1 Credit

Nursing Issues II is a broad survey course examining career planning, employment strategies, nursing history and nursing practice issues. Students are given an opportunity to access their knowledge in preparation for the NCLEX licensure examination.
2 Seminar Hours
Prerequisites: ADN 103 Nursing Issues I, ADN 204 Regulatory Concepts, ADN 205 Psychological Concepts I, and ADN 210 Family Centered Maternity Nursing

ADN 298 Nursing Seminar III — 0 Credits

Transfer and advance placement students meet in a seminar setting to facilitate transition into the nursing program. The nursing department philosophy, use of the classroom bibliography and objectives, and nursing process are discussed. Students are provided an opportunity to practice and demonstrate selected nursing skills, Individual conferences are held with each student to assess progress.
Prerequisites: Students in this course must have met requirements for transfer or have passed the required challenge examination for advance placement.

OFFICE TECHNOLOGIES

Note-Students who fail a skill course twice will not be allowed to register a third time without taking a full semester away from the course and completing the Counseling Center tests.

DOT 101A Typewriting — 1 Credit

Introduction to the electric typewriter keyboard and machine operations. Development of basic skill building in typing exact copy by touch for 3 minutes with a maximum of 3 errors.
2 Class Hours, 3 Laboratory Hours, 5-Week Course
Prerequisite: For international students, English as a Second Language or permission of instructor

DOT 101B Typewriting — 1 Credit

Continuation of skill building with emphasis on pacing and rhythm drills. Development of speed and accuracy in typing exact copy by touch for 5 minutes with a maximum of 5 errors.
2 Class Hours, 3 Laboratory Hours, 5-Week Course
Prerequisite: DOT 101A Typewriting or equivalent

DOT 101C Typewriting — 1 Credit

Development of basic techniques in preparing typewritten letters, horizontal and vertical centering exercises, memorandums, tabulations, outlines, manuscripts.
2 Class Hours, 3 Laboratory Hours, 5-Week Course
Prerequisite: DOT 101B Typewriting or equivalent

DOT 102A Typewriting — 1 Credit

Advanced skill building with emphasis on pacing and rhythm drills. Development of speed and accuracy in typing exact copy by touch for 5 minutes with a maximum of 5 errors.
2 Class Hours, 3 Laboratory Hours, 5-Week Course
Prerequisite: DOT 101C Typewriting, ability to type without looking at keys and a 5-minute timing at 41 net words per minute with 5-error maximum.

DOT 102B Typewriting — 1 Credit

Development of advanced techniques in typing different styles of business letters, manuscripts, memorandums.
2 Class Hours, 3 Laboratory Hours, 5-Week Course
Prerequisite: DOT 102 A Typewriting or equivalent

DOT 102C Typewriting — 1 Credit

Development of advanced techniques in typing different styles of tabulations, financial statements and business forms.
2 Class Hours, 3 Laboratory Hours, 5-Week Course
Prerequisite: DOT 102A Typewriting or equivalent

DOT 108 Keyboarding — 1 Credit

Development of basic skills in typing exact copy by touch for three minutes with a maximum of three errors on the IBM Personal Computer.
3 Class Hours, 5-Week Course

DOT 109 Basic Transcription — 3 Credits

Designed to improve understanding of basic sentence structure, grammar, business vocabulary and punctuation as related to the business world. Practical application through exercises at the typewriter on rough draft copy.
3 Class Hours
Prerequisite: DOT 101A, B or equivalent or concurrent enrollment in DOT 101 A, B

DOT 110 Shorthand — 3 Credits

Beginning course in Gregg Shorthand, Series 90 System. Basic principles to promote the ability to read fluently from plates and notes. Longhand and typewritten transcription from shorthand notes dictated from unfamiliar material at minimum rate of 60 words a minute.
2 Class Hours, 3 Laboratory Hours
Prerequisite: DOT 101 A, B and C Typewriting or equivalent or concurrent enrollment in DOT 101 A, B and C Typewriting

DOT 111 Shorthand and Transcription — 3 Credits

Development of a minimum rate of 70 words per minute shorthand speed, dictated from unfamiliar material, with efficient transcription techniques to produce typewritten mailable transcripts. Emphasis on shorthand speed building while integrating the correct usage of principles of grammar, spelling, punctuation, capitalization, vocabulary, numbers, word division, words often confused.
2 Class Hours, 3 Laboratory Hours
Prerequisite: DOT 110 Shorthand or equivalent and DOT 101 A, B, and C Typewriting or equivalent and DOT 109 Basic Transcription of concurrent enrollment

DOT 117 Text Editing Concepts and Procedures — 3 Credits

Presentation of the concepts of word processing followed by development of word processing skills. Previous keyboarding experience required.
3 Class Hours

DOT 130 Freshman Orientation — 1/2 Credit

Introduction to the College and departmental policies and procedures. Discussions pertaining to the Department of Office Technologies options and career paths. A review of the College's services available for students.
1 Class Hour Bi-Weekly

DOT 151 Business Communications — Credits

Development of desirable written and oral communication style. Review of basic writing mechanics. Composition of letters of inquiry and reply, claim and adjustment, credit and collection, sales and promotion, application. Memorandums, news releases, short reports, telegrams.
3 Class Hours
Prerequisite: DOT 101 C Typewriting or concurrent enrollment and DOT 109 Basic Transcription

DOT 211 Advanced Typewriting — 3 Credits

Training in advanced typewriting techniques. Emphasis in preparing documents for law, insurance, real estate, banking and technical fields. Continuation of speed building.
2 Class Hours, 2 Laboratory Hours
Prerequisite: DOT 102 A, B and C Typewriting

DOT 230 Advanced Shorthand — 3 Credits

Emphasis on increasing shorthand speeds and improving production of mailable typewritten transcripts through an increased knowledge of basic information and vocabulary from such topics as finance, law, information processing and environmental sciences. Transcription at the typewriter from notes dictated from unfamiliar material at a minimum of 80 words per minute.
2 Class Hours, 3 Laboratory Hours
Prerequisite: DOT 11 Shorthand and Transcription and DOT 102 A, B, C Typewriting or concurrent enrollment

DOT 235 Executive Machine Transcription — 1 Credit

Practical experience in the use of transcribing equipment. Students are expected to apply correct usage of principles of grammar, punctuation and spelling, as well as develop increasing skill in transcribing business communications.
1 Class Hour, 4 Laboratory Hours, 5-Week Course
Prerequisites: DOT 111 Shorthand and Transcription and DOT 102, A, B, C Typewriting

DOT 236 Machine Transcription — 4 Credits

Emphasis on increasing skill transcribing recorded materials. Continuing development of knowledge of business vocabulary, correct usage of principles of grammar, punctuation, spelling in the machine transcriptions of business documents.
3 Class Hours, 2 Laboratory Hours
Prerequisite: DOT 102 A and B Typewriting and DOT 109 Basic Transcription

DOT 237 Text Editing I — 1 Credit

An opportunity to develop basic word processing skills. Students create edit, print, and file documents. Hands-on experience as well as theory applied to machine operations.
1 Class Hour, 4 Laboratory Hours, 5-Week Course
Prerequisite: DOT 101 A, B, C Typewriting

DOT 238 Text Editing II — 1 Credit

A continuation of DOT 237 Text Editing I. Students develop additional text editing while learning advanced functions, such as adjusting page lengths, moving text, advanced formatting functions, printing documents while typewriting, creating dual columns, merging documents. The refinement of these skills to be ascertained as students procedure documents and complete relevant projects.
1 Class Hours, 4 Laboratory Hours, 5-Week Course
Prerequisite: DOT 237 Text Editing

DOT 239 Text Editing III — 1 Credit

A refinement of text editing skills for the word processing major. Students should learn document management and security, loop operations, equations, list processing and the calculator mode. Students should develop input/output text editing skills associated with all previously acquired machine functions. They will create, edit and revise complicated document including manuscripts and statistical reports and tables.
1 Class Hour, 4 Laboratory Hours, 5-Week Course
Prerequisite: DOT 238 Text Editing II

DOT 241 Word Processing Concepts — 3 Credits

A study of terminology, concepts and procedures utilized in producing written communications at top speed, with the greatest accuracy, the best effort, and lowest cost. Students to develop an understanding of current office procedures in organizing and implementing a word processing/administrative support operation.
3 Class Hours
Prerequisite: DOT 102 A, B, C Typewriting and DOT 151 Business Communications

DOT 242 Office Procedures — 3 Credits

Final preparation for an office career. Business activities related to word processing, postal and shipping services, telephone procedures, travel arrangements, planning meetings, banking services, application of filing procedures.
3 Class Hours
Prerequisite: For Office Services Assistant students - DOT 151 Business Communications, DOT 236 Machine Transcription, DOT 238 Text Editing II and DOT 243 Records Management.
For Executive Secretarial Students-DOT 151 Business Communications, DOT 230 Advanced Shorthand, DOT 238 Text Editing II and DOT 243 Records Management

Note-This is a capstone course and must be taken during the student's final semester.

DOT 243 Records Management — 1 Credit

A study of classification systems including alphabetic, subject, numeric, and geographic methods. In addition, students study the development of information management programs including the record management process, procedures for controlling information, and micrographic and automation processes.
3 Class Hours, 5-Week Course

DOT 246 Office Machines — 3 Credits

Practical experience in the operation of electric and electronic typewriters, calculators, mimeo and spirit duplicators, transcribing and dictating equipment.
1 Class Hour, 4 Laboratory Hours
Prerequisite: DOT 109 Basic Transcription and DOT 101 A, B, C Typewriting
Corequisite: DOT 248 General Office Procedures

DOT 248 General Office Procedures — 3 Credits

Analysis of the basic tasks performed by the office employee. How to apply for and secure the office position. Filing systems and procedures, telephone and telegram services, postal information, office supplies and equipment.
3 Class Hours
Prerequisite: DOT 109 Basic Transcription and DOT 101 A, B, C Typewriting and/or concurrent enrollment in DOT 102 A, B, C Typewriting
Corequisite: DOT 246 Office Machines

DOT 250 Administration — 3 Credits

A study of the problems and scope of management in general. Students given a thorough understanding of operative management. Students should understand the need to simplify, coordinate, and mechanize office operations. An understanding of the objectives, policies and procedures of specific departments are studied.
3 Class Hours

Note-This is a capstone course and must be taken during the student's final semester

DOT 260 Directed Secretarial Experience-Model Office — 2 Credits

Secretarial students are required to work at least four hours weekly in the model office to gain practical working knowledge by producing various types of campus communications.
4 Laboratory Hours

Note-This is a capstone course and must be taken during the student's final semester, with the exception of those students eligible for advanced placement.

DOT 270 Internship — 2 Credits

Career-related employment in a major industry that complements academic preparation in the Office Technologies area. Interns train and work on state-of-the-art information processing equipment and receive on-the-job experience in a variety of office procedures. Interns meet with the coordinator as scheduled.
Prerequisite: Departmental approval

DOT 299 Independent Study — 1-4 Credits

Advanced investigation or research in an individual students major field of study. Under the guidance of a faculty member, the independent study concerns material beyond the scope and depth of the ordinary course offering. Only one independent study course is allowed per semester.
Prerequisite: Approval of faculty members and department chairperson

PARALEGAL ASSISTANT

All Paralegal Assistant courses are taught in the evening only.

*PLA 110 Survey of Paralegalism — 3 Credits

Role of the paralegal and attorney. Introduction to jurisprudence and functions of administrative agencies. Local, state, federal courts. Introduction to contracts, torts, negligence, criminal procedure, real property law, law office management. Legal terminology.
3 Class Hours

*PLA 120 Advanced Paralegalism — 3 Credits

Continuation of law office management. Introduction to research techniques, family law, surrogate, wills and estates, agency and partnership, bankruptcy, corporate law, commercial paper, workman's compensation with procedures and practices of each. Legal terminology.
3 Class Hours

*PLA 200 Real Property Law — 3 Credits

Comprehensive survey of law of real property emphasizing practical application to a paralegal function. Analysis of forms of deeds, bonds, notes, mortgages, assignments, discharges, purchase of contracts, leases, options. Training in searching title, basic understanding of abstracts of title, real property litigation, estates, condemnation and foreclosure.
3 Class Hours
Prerequisite: PLA 110 Survey of Paralegalism or permission of department

*PLA 207 Legal Writing and Research — 3 Credits

Development of legal research and drafting skills through use of digests, reporter systems, and other features of law libraries. Analysis of various types of legal documents for clarity, composition, conciseness. Practice in research and drafting of legal documents.
3 Class Hours
Prerequisite: PLA 110 Survey of Paralegalism and ENG 110 Written Expression I, or department permission

*PLA 215 Estates, Probates and Trusts — 3 Credits

Disposition of decedent's property, law of interstate succession, execution and probate of wills, nature and creation of trusts and the administration of estates and trusts, estate and trusts, estate and gift tax preparation.
3 Class Hours
Prerequisite:PLA 110 Survey of Paralegalism or permission of department

*PLA 220 Contracts — 3 Credits

The law of contracts, their historical significance, formation, validity, interpretation, transfer or contractual rights. Assignment, third party beneficiaries, discharge, breach and remedies. (BUS 118 Business Law I may be substituted.)
3 Class Hours

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**

*PLA 222 Medical Law — 3 Credits

General coverage of how legal and medical issues are inter-related, including right to treatment, organ transplant, right to die, abortion issues, medical malpractice, informed consent, insanity defense, surrogate mothers. Lecture and discussion. How these topics affect the role of the attorney and paralegal in servicing client needs.
3 Class Hours

*PLA 225 Family Law — 3 Credits

Pleadings relative to general practice of law in relationship to the family unit. Laws relating to marriage, divorce, annulment, custody and support, adoption, name change, guardianship, paternity. Written pleadings and necessary research pertaining to these aspects of family law.
3 Class Hours

*PLA 226 Taxation Law for Paralegals — 3 Credits

Principles of federal taxation, analysis of IRS code and related case law, emphasis on law and concepts of taxation, basic and advanced tax law terminology, litigation involving the IRS. Exploration of social changes, and factors involving tax problems, current issues in tax reform, perspective of the paralegal regarding resolution of tax disputes.
3 Class Hours

*PLA 227 Constitutional Law for Paralegals

The practice of everyday general law as affected by the U.S. Constitution, and the bill of rights, with applications to the paralegal function. Issues of contemporary concern including cases of local courts and of the Supreme Court and their implications for law in general and society at large.
3 Class Hours
Prerequisite: PLA 207 Legal Writing and Research or departmental permission

*PLA 240 Corporate Law — 1 Credit

Types, uses and organization of the corporation, antitrust and securities law, mergers and consolidation, liquidation and dissolution.
1 Class Hour

*PLA 250 Municipal Law — 1 Credit

Structure and operations of local government in New York State. Evolution of local government in New York during the first two centuries of its existence. Laws, ordinances, and operations.
1 Class Hour

*PLA 260 Labor-Management Relations (Labor Law) — 1 Credit

Labor-management relations in the public and private sectors. Taft-Hartley Act, National Labor Relations Act and Wagner Act, unfair labor practices, labor contracts, arbitration and mediation, availability of injunctions in labor disputes.
1 Class Hour

*PLA 270 Vehicle and Traffic Law — 1 Credit

Regulations of traffic within the State of New York. Emphasis on violations and traffic-related misdemeanors resulting from violation of the rules of the road and court proceedings resulting therefrom.
1 Class Hour

*PLA 280 Litigation and Trial Preparation — 1 Credit

Intake procedures, systems and analysis, concepts of jurisdiction and venue, parties to an action, pleadings, pre-trial procedures, motions and special practice, special proceedings, trials, judgements and appeals.
1 Class Hour

*PLA 290 Landlord-Tenant Relations — 1 Credit

Problems faced by landlords and tenants, private housing, live-in arrangements, covenants, leases, warranties. Tenant and landlord rights and obligations.
1 Class Hour

*PLA 299 Independent Study: Paralegal — 1-3 Credits

An individual student project in paralegal studies which is beyond the scope or requirements of the courses offered by the program. Conducted under the direction of a faculty member or attorney, and approved by the program coordinator.
Prerequisite: PLA Survey of Paralegalism plus three additional hours in a 200 level PLA course.

PHILOSOPHY

*PHI 102 General Philosophy — 3 Credits

Meaning of philosophy, suggestions for reading philosophy, informal logic, methodology and basic philosophical terms including idealism, dualism, naturalism.
3 Class Hours

PHI 103 Philosophy of Mind — 3 Credits

Introduction to metaphysical philosophy. Examination of the major views of reality: dualism, materialism, idealism. Analysis and discussion of evidence and arguments relating to issues such as "mind," immortality, free will vs. determinism, and the existence of God.
3 Class Hours

PHI 104 Philosophy of Religion — 3 Credits

Relation of religion and philosophy and an investigation of different concepts of God. Analysis of religious types and experiences, different attempts to justify religious beliefs. Investigation of the logic of religious experience through an analysis of the leading ideas in the philosophy of religion both as an historical and contemporary phenomenon.
3 Class Hours

PHI 111 Humanities — 3 Credits

Critical analysis of human development from the early beginnings to the present state through a thematic investigation of literature, philosophy, history and the arts. Classical, Medieval, Renaissance and Metaphysical Periods.
3 Class Hours

PHI 112 Humanities — 3 Credits

Critical analysis of human development from the early beginnings to the present state through a thematic investigation of literature, philosophy, history and the arts. Neoclassical, Romantic, Victorian, Early Modern and Late Modern Periods.
3 Class Hours

PHI 120 Verbal Reasoning — 3 Credits

To improve the student's ability in reasoning. Concentration on qualifications, symbols, ambiguity, analysis and semantics.
3 Class Hours

PHI 201 Ethics: Moral Philosophy — 3 Credits

Main classical and modern ethical theories, including such theorists as Plato, Aristotle, Spinoza, Mill, Kant, Moore, Toulmin, Ayer, Westermarck. Comparison and contrast of normative and meta-ethical theories, the good life and how one should act, the meaning of moral judgements and the criteria of validity, justification or moral beliefs and the ground of moral responsibility.
3 Class Hours

PHI 202 Logic — 3 Credits

Analysis and practical application of the elements of logic as they apply to thinking on both a linguistic and formal level. Forms of argument, informal and formal fallacies, significance of the emotions on decision making, inductive and deductive processes. Symbolizing arguments and formal proofs of validity.
3 Class Hours
Prerequisite: Any Philosophy (PHI) course or any Mathematics (MAT) course numbered MAT 139 or higher

PHI 203 Philosophical Issues in American Education — 3 Credits

An inquiry into educational issues which can be illuminated by philosophical perspectives: educational aims, conceptions of learning, nature of knowledge, ethics of teaching, equal educational opportunity, freedom and authority, theories of moral development, school and society, and curriculum. Philosophical background to educational policy issues of special interest to prospective teachers, but also to individuals (citizens) concerned about public schools.
3 Class Hours

PHI 206 Social and Political Philosophy — 3 Credits

A philosophical study of the social/political organization of society through an examination of such topics as justice, authority, leadership, individual rights, and of relationship between the state and various social institutions, such as family, business, church, and education.
3 Class Hours

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

PHI 208 Humanities and Technology — 3 Credits

An investigation of the interaction of humanities and technology. An examination of the reciprocal impacts of various human values and technology through consideration of these topics: methods of inquiry, communication, life and death, the environment, the industrial revolution, and robotics and artificial intelligence. This course was developed through a grant from the National Endowment for the Humanities.
3 Class Hours

PHI 299 Independent Study: Philosophy — 1-3 Credits

An individual student project concerned with advanced work in a specific area of philosophy. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of ordinary course.
Prerequisite: 3 semester hours of college level work in philosophy

PHYSICAL EDUCATION

Most of the Physical Education courses are half a semester in length. For the most part, the courses that take place outdoors are given in the first half of the fall semester or the second half of the spring semester; those courses that occur indoors are given in the second half of the fall semester or the first half of the spring semester.

NOTE-Students taking Physical Education courses should have a Health Questionnaire on file with the College Health Service (Wales Building, Room 104). Forms are available in the Health Service upon request.

PED 100 Archery — ½ Credit

Fundamentals of shooting - seven step approach. Proper target shooting technique and form stressed.
4 Class Hours, 11 Laboratory Hours per semester

PED 103 Backpacking — 1 Credit

A series of laboratories and lectures culminating in a four-day mandatory backpacking trip. Students learn to select, care for, and use properly the essential equipment, as well as some low cost alternatives to expensive items. The stress is on safety and low ecological impact camping.
15 Class Hours, 15 Laboratory Hours per half semester

PED 106 Badminton — ½ Credit

Instruction and practice in the various strokes. Rules, terminology and equipment. Strategy for singles and doubles.
4 Class Hours, 11 Laboratory Hours per half semester

PED 112 Bowling — ½ Credit

Bowling fundamentals including ball selection, grip, stance, approach and delivery. Etiquette, scoring, correction of basic mistakes in delivery. Classes are at off-campus site and students must pay for own games, shoe rental and transportation.
3 Class Hours, 12 Laboratory Hours per half semester

PED 115 Physical Conditioning I — ½ Credit

A general physical conditioning class. Each student is pre-tested and then establishes his/her individual program. A selected battery of exercises (circuit) is utilized with some individual choice. (Formerly entitled Circuit Training and Conditioning.)
3 Class Hours, 12 Laboratory Hours per half semester

PED 116 Physical Conditioning II — 1 Credit

General overall physical conditioning with major emphasis on cardiovascular fitness. Combines indoor and outdoor workouts on alternate days. Class meets three times per week for 10 weeks.
8 Class Hours, 22 Laboratory Hours per semester

PED 121 Golf — ½ Credit

Skills, etiquette and strategy. Students required to play nine holes and hit at a driving range, providing their own transportation and fees. Clubs provided for those without.
4 Class Hours, 11 laboratory Hours per half semester.

PED 122 Horseman ship — 1 Credit

Basic of grooming, saddling and safety procedures. Development and expansion of riding skills. Elementary knowledge of horses their care and maintenance. Two options available: 1. English. 2. Western. (Additional fee and taught off campus.)
8 Class Hours, 22 Laboratory Hours per semester

PED 127 Jogging — ½ Credit

Jogging as a possible leisure time activity. Physiology benefits, improvement of technique and basic principles of training. Individual works at own level and sets own goals. Distance usually worked: 2 miles.
3 Class Hours, 12 Laboratory Hours per semester

PED 130 Karate — 1 Credit

Classical karate on the beginning and intermediate levels. Philosophy and brief history of karate. Basic kata (forms) together with self defense and pre-arranged sparring techniques. Free sparring with no body contact. Emphasis on physical conditioning and mental discipline.
8 Class Hours, 22 Laboratory Hours per semester

PED 132 Concepts in Physical Education — 2 Credits

Emphasis on the basic knowledge, understanding and values of physical education. To help students make important decisions about their own personal fitness.
30 Class Hours per semester

PED 143 Cross-Country Skiing — ½ Credit

Instruction and practice in cross-country skiing - beginning through advanced. Conduct, terminology, safety and equipment. Classes both on and off campus. Skis, poles, bindings provided; students responsible for boots and transportation.
3 Class Hours, 12 Laboratory Hours per half semester

PED 146 Aerobics — 1 Credit

Movement and exercise done with music to achieve cardiovascular fitness, improve muscle tone, develop body awareness, increase energy. Open to both men and women.
8 Class Hours, 22 Laboratory Hours per semester

PED 147 Soccer (Women) — ½ Credit
PED 148 Soccer (Men) — ½ Credit

Instruction and practice in the fundamental skills of kicking, tackling, trapping, dribbling and heading. Rules and tactics. Team competition. Separate sections for men and women.
4 Class Hours, 11 laboratory Hours per half semester

PED 149 Snorkeling — 1 Credit

Designed to teach the swimmer the techniques of snorkeling, safety equipment selection and skills. Offered to student taking Topical Ecology during intersession.
8 Class, 22 Laboratory Hours per semester

PED 169 Tennis — 1/2 Credit

Instruction and practice in the basic strokes - forehand, backhand, serve and volley. Rules, terminology and equipment. Strategy for singles and doubles.
4 Class Hours, 11 Laboratory Hours per half semester

PED 170 Trail Riding — ½ Credit

Basics of grooming, saddling, and safety procedures. Development and expansion of riding skills - learning to cope with natural hazards like creeks, traffic, terrain. Elementary knowledge of horses, their care and maintenance. (Taught off campus and an additional fee is required.)
4 Class Hours, 11 Laboratory Hours per half semester

PED 171 Physiology of Exercise — 1 Credit

Designed to develop an understanding and appreciation for the role of consistent exercise in maintaining good health. The interrelationship of the muscular, cardiovascular, respiratory and digestive systems and the net effect of training on these systems.
1 Class Hour

PED 172 Volleyball — ½ Credit

A basic course in the fundamentals of power volleyball. Team strategy, history and rules. Drills and competitive play.
4 Class Hours, 11 Laboratory Hours per half semester

PED 175 Weight Training — ½ Credit

Introduction to the Universal Gym as a means of physical conditioning. Components of fitness and principles of training discussed. Several strength building prescriptions presented.
3 Class Hours, 12 Laboratory Hours per half semester

PED 299 Independent Study — ½ or 1 Credit

Student undertakes a project of own choice with guidance from faculty member. The project is intended for a student who has completed requirements.
Prerequisite: 2 Semester Hours in Physical Education

PHYSICAL SCIENCE

PHS 111 Physical Science for Today — 3 Credits

Beginnings of astronomy, the earth and moon, planets and satellites, the sun and other stars, cosmology. Chemistry of our atmosphere, weather and methods of modification, water cycle and pollution. Composition of the earth's crust erosional processes, earthquakes and volcanoes, plate tectonics, energy resources, nuclear radiation. Required field trips supplement classroom experience.
2 Class Hours, 2 Laboratory Hours

PHS 113 Physical Science - Astronomy — 4 Credits

The Copernican and Ptolemaic models of the solar system. The planets, sun, moon and comets. Stellar magnitudes and evolution of stars. The size and age of the universe and modern developments in astronomy and cosmology. Required field trips supplement classroom experience.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 090B and C Basic Mathematics Review or equivalent

PHS 114 Physical Science - Meteorology — 4 Credits

The atmosphere - composition, circulation, energy transfer, observations and instrumentation used. Weather phenomena - air masses, weather patterns, severe weather and optics. Forecasting through observations and plotting. Introduction to climatology, the control and classification of climates based upon principles of meteorology. Required field trips supplement classroom experience.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 090B and C Basic Mathematics Review or equivalent

PHS 115 Physical Science - Geology — 4 Credits

Crystals, minerals, rocks - their structure and identification. Erosion of the crust, its uplifts and deformation. Earthquakes and the interior of the earth, geologic dating and the physical history of the earth. Plate techtonics and continental drift, ecology from a geologic viewpoint. Required field trips supplement classroom experience.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 090B and C Basic Mathematics Review or equivalent

PHS 116 Physical Science - Energy and Environment — 4 Credits

Basic physical principles and the role of these principles in understanding and appreciating the problems of energy production, distribution and the effects on the environment. Problems of pollution and depletion of natural resources, Required field trips supplement classroom experience.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 090B and C Basic Mathematics or equivalent

PHYSICS

PHY 100 Preparatory Physics I — 4 Credits

Composition and resolution of forces. Kinematics and dynamics. Momentum and Energy conservation Laws. Heat.
4 Class Hours
Prerequisite: MAT 104 Basic Technical Mathematics or equivalent

PHY 101 Preparatory Physics II — 4 Credits

Thermodynamics, wave motion, sound, and light. Electricity and magnetism. Atomic and nuclear physics.
4 Class Hours
Prerequisite: PHY 100 Preparatory Physics I

PHY 117 Physics — 3 Credits

Vectors, linear motion, energy, momentum, electric fields, potential difference. Ohm's law, d-c circuits, motion of charges in magnetic fields, electromagnetic induction. Mirrors and lenses, nature of light, atomic structure, production of X-Rays, radioactive decay, nuclear reactions, interaction of radiation with matter, radiation detection, radiation protection standards. For Medical Laboratory and Radiological Technology students.
2 Class Hours, 2 Laboratory Hours
Prerequisite: MAT 090B and C Basic Mathematics Review or equivalent

PHY 141 Physics — 4 Credits

Composition and resolution of vectors, forces in equilibrium, moments of forces, elasticity, linear and projectile motion, forces and motion, rotation, work and energy, impulse and momentum, harmonic motion, fluid mechanics. temperature, thermal expansion, heat. For Engineering Technology students.
3 Class Hours, 2 Laboratory Hours
Corequisite: MAT 161 Precalculus or equivalent

PHY 142 Physics — 4 Credits

Thermodynamics, thermal properties of gases, wave motion, and sound, electrostatics, direct current, magnetism, electromagnetic induction, alternating current, electromagnetic radiation, illumination, reflection and refraction of light, mirrors and lens, optical instruments, diffraction, nuclear energy. For Engineering Technology students.
3 Class Hours, 2 Laboratory Hours
Prerequisite: PHY 141 Physics

PHY 144 Physics II—E — 4 Credits

Thermodynamics, wave motion and sound, photometry; reflection, refraction, dispersion, light, mirrors and lenses, optical instruments, diffraction, lasers, electrostatics, potential, current, resistance, magnetics, semi-conductor theory. For Electrical Technology students.
3 Class Hours, 2 Laboratory Hours
Prerequisite: PHY 141 Physics, EET 121 Electrical Circuits

PHY 161 Physics — 4 Credits

Structure and language of physics. Standard units of measurement of length, mass and time. Basic mathematical foundation: elementary trigonometry, vector algebra, powers of ten and significant figures. Mechanics: motion, Newtons's Law, work, energy and momentum principles, rotation. Waves and wave phenomena, mirrors and lenses, optical instruments, sound. First course in an introductory non-calculus sequence. For Liberal Arts students who need a laboratory science.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 161 Precalculus or equivalent

PHY 162 Physics — 4 Credits

Concepts of heat and temperature, kinetic theory, thermodynamics. Electricity and magnetism: electrostatics, electrical circuits, electromagnetic phenomena. Modern physics: relativity, quantum theory, atomic structure radioactivity. Second half of introductory physics for Liberal Arts students who need a laboratory science.
3 Class Hours, 3 Laboratory Hours
Prerequisite: PHY 161 Physics

PHY 181 Engineering Physics I — 4 Credits

Vectors, equilibrium, kinematics, Newton's Law of Motion, centripetal force, work and energy, impulse and momentum, rotation, elasticity, harmonic motion, hydrostatics and hydrodynamics.
3 Class Hours, 2 Laboratory Hours
Corequisite: MAT 181 Calculus I with Analytic Geometry and EGR 100 Orientation

PHY 182 Engineering Physics II — 4 Credits

Relativistic mechanics, Coulomb's Law, electrostatic field, potential, capacitance, direct currents, magnetic force on currents, magnetic field of current, induced emf, inductance, alternating currents.
3 Class Hours, 2 Laboratory Hours
Prerequisite: PHY 181 Engineering Physics I
Corequisite: MAT 182 Calculus II with Analytic Geometry and EGR 100 Orientation

PHY 281 Engineering Physics III — 4 Credits

Temperature, heat transfer, thermodynamics, kinetic theory, waves, sound, geometrical and physical optics, introduction to quantum physics, atomic and nuclear physics.
4 Class Hours
Prerequisite: 1 year of calculus and PHY 182 Physics II or equivalent
Corequisite: EGR 200 Orientation

POLITICAL SCIENCE

POS 201 Introduction to American Government — 3 Credits

American political institutions, processes and behavior. The relationships among cultural, legal and social aspects of the political system. Structure, organization and function of political parties, pressure groups and mass media. Application to contemporary issues and events.
3 Class Hours

POS 203 International Relations — 3 Credits

Basic concepts and principles of world politics. International conflict resolution, international organizations, the struggle for power. Factors affecting the relationships among the major powers. Role of diplomacy, alliances, war and peace in the world arena.
3 Class Hour

POS 204 American State and Local Government 3 Credits

Theory and practice of state and local government, utilizing a problem-solving or "policy" approach. Students are encouraged to explore in depth the workings of city and county governments locally.
3 Class Hours

POS 299 Independent Study 1-3 Credits

An independent student project which is beyond the scope of courses currently offered by the department, directed by a faculty member with approval of the department chairperson.
Prerequisite: 3 Semester hours of political science

PSYCHOLOGY

PSY 100 Psychology of Personal Adjustment 3 Credits

Investigation of bio-social factors which influence human behavior with emphasis on: (1) development of physical, mental, emotional, social and spiritual well-being; (2) personal responsibility for one's lifestyle and the consequences that flow from one's choices. (This course cannot be used as a prerequisite for other psychology courses.
3 Class Hours

PSY 103 Psychology of Adulthood 3 Credits

Investigation of the continuity-change pattern that characterizes normal adulthood (20 to 60 years). Identification of individual responses to life crises. Introduction to skills that facilitate meeting self-selected goals and skills that assist others to fulfill their goals.
3 Class Hours

PYS 110 General Psychology 3 Credits

Definition and description of psychology. Functions of neural system, sensation and perception, learning, memory, motivation, emotion, conflict and frustration, personality, social psychology. Methods and statistical applications, history and fields of psychology.
3 Class Hours

PSY 150 to 200 Special Topics in Psychology 1 Credit

Topics of interest to a (class size) group will be explored. Prospective students should make their request at least three weeks before the end of the preceding semester. Possible topics, for example, could include stress management or child rearing styles.

PSY 211 Child Development 3 Credits

The growth, maturation and development of children, including mental and motor phases, learning, motivation and personality formation.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 212 Adolescent Development 3 Credits

The developmental tasks of the adolescent years, influence of people and institutions on self-concept. Physical, psychological, intellectual effects and intellectual growth.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 214 Abnormal Psychology 3 Credits

Survey of the normal and abnormal personality with special emphasis on certain causal factors pertaining to maladaptive behavior. A general framework for understanding abnormal behavior patterns, including common misconceptions, accepted definitions, and the classification of mental disorders.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 217 Introduction to Counseling Theory and Practice 3 Credits

Varied methods of counseling, employing current theories, situational examples and means for determination of method to be used. Practical cases in social sciences, clinics, hospitals and educational institutions. Overall training and personality of the counselor.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 223 Intelligence and the Mentally Retarded 3 Credits

The several meanings of the concept of intelligence, distribution of intelligence in populations, development and organization of intelligence at different levels, concepts of retardation. The various levels and causations of retardation, development at all chronological ages, learning and employment expectations, methods of assisting with behavioral improvement, cooperative social agencies.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 227 Behavior Modification 3 Credits

Principles of behavior modification using classical and operant techniques. Practical applications to these principles of the fields of child care, psychotherapy and correctional institutions.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 299 Independent Study 1-3 Credits

An individual student project in psychology which is beyond the scope or requirements of the courses offered by the department, conducted by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisites: PSY 110 General Psychology plus 3 additional hours in a 200 level PSY course

RADIOLOGIC TECHNOLOGY

RAD 100 Introduction to Radiologic Technology 3 Credits

Overview of radiologic technology through the study of its historical development, its placement in the medical field today, the organization of a modern radiology department, professional ethics, and medicolegal aspects of radiology, and math for radiographers.
2 Class Hours, 3 Laboratory Hours

RAD 101 Radiologic Technology I 3 Credits

Introduction to the basic principles of radiographic imaging including recording media, processing methods, radiographic quality and radiographic accessories. Lecture and laboratory are coordinated to enhance these fundamental concepts.
3 Class Hours, 1 Laboratory Hour

RAD 102 Radiologic Technology II 3 Credits

Advanced study of the factors contributing to the radiographic image.
3 Class Hours, 1 Laboratory Hour
Prerequisite: RAD 101 Radiologic Technology I or permission of instructor

RAD 103 Positioning I 1 Credit

Instruction and practice in radiographic positioning of the appendicular skeleton.
3 Laboratory Hours

RAD 104 Positioning II 1 Credit

Instruction and practice in radiographic positioning of the axial skeleton.
3 Laboratory Hours
Prerequisite: RAD 131 Clinical Education I

RAD 105 Medical Terminology 1 Credit

Basic medical terminology for the student radiographer.
1 Class Hour

RAD 110 Methods of Patient Care 1 Credit

Patient care procedures routinely performed in the radiology department.
1 Class Hours, 1 Laboratory Hour

RAD 115 Radiation Protection 1 Credit

Interaction of radiation with living organisms, particularly as related to humans. Emphasizes basic radiation protection, its philosophy and rules governing the application of ionizing radiation on humans.
1 Class Hour

RAD 131 Clinical Education I (Winterim) 0 Credit

Introduction and orientation to the radiology department in an affiliated hospital. (Successful achievement is a graduation requirement.)
2 Weeks of instruction
Prerequisite: BIO 131 Human Biology I and RAD 100 Introduction to Radiologic Technology and RAD 110 Methods of Patient Care or permission of instructor

RAD 132 Clinical Education II 2 Credits

Observation and clinical experience for the development of competency involving elementary radiographic procedures in an affiliated hospital.
16 Laboratory Hours
Prerequisite: RAD 131 Clinical Education (Winterim) or permission of instructor

RAD 133 Clinical Education III (Summer Term I) 3 Credits

Clinical experience for development of competency involving general radiographic procedures in an affiliated hospital.
40 Laboratory Hours
Prerequisite: RAD 132 Clinical Education II and BIO 132 Human Biology II or permission of instructor

RAD 203 Positioning III — 1 Credit

Laboratory instruction and practice in positioning techniques involving the skull and facial bones, pediatric radiography and radiography of the trauma patient.
3 Laboratory Hours
Prerequisite: RAD 133 Clinical Education III or permission of instructor

RAD 210 Radiologic Physics — 4 Credits

Physics of radiographic equipment, including fundamental electronics, X-Ray production, the X-Ray tube and related circuitry, and preventive maintenance.
4 Class Hours

RAD 216 Imaging Modalities — 1 Credit

Introduction to the principles of computerized axial tomography, nuclear medicine, magnetic resonance imaging, and ultrsound.
1 Class Hour
Prerequisite: RAD 210 Radiologic Physics or permission of instructor

RAD 220 Radiologic Pathology — 2 Credits

A presentation of the various medical and surgical diseases and their relationship to radiographic procedures.
2 Class Hours
Prerequisite: BIO 132 Human Biology II or permission of instructor

RAD 225 Special Radiographic Procedures — 4 Credits

Introduction to radiographic examinations involving surgical procedures and specialized equipment.
3 Class Hours
Prerequisite: RAD 230 Clinical Education IV or permission of instructor

RAD 230 Clinical Education IV — 2 Credits

Practical application of advanced positioning techniques with emphasis on the skull and facial bones.
16 Laboratory Hours
Prerequisite: RAD 133 Clinical Education III (Summer) or permission of instructor

RAD 231 Clinical Education V (Winterim II) — 0 Credit

Clinical assignment devoted to the application of radiographic procedures under direct supervision in a cooperating hospital. (Successful achievement is a graduation requirement.)
2 Weeks of instruction
Prerequisite: RAD 230 Clinical Education IV or permission of instructor

RAD 232 Clinical Education VI — 2 Credits

Practical application of advanced radiographic procedures under direct supervision in an affiliated hospital.
16 Laboratory Hours
Prerequisite: RAD 231 Clinical Education V (Winterim) or permission of instructor

RAD 233 Clinical Education VII — 3 Credits

Clinical experience for the development of competency.
40 Laboratory Hours

RAD 245 Radiobiology — 2 Credits

Radiobiology and advanced radiation protection procedures related to diagnostic and therapeutic uses of radiation.
2 Class Hours
Prerequisite: RAD 210 Radiologic Physics or permission of instructor

RAD 250 Image Assessment — 2 Credits

The basic principles and techniques of quality assurance testing presented and illustrated through laboratory experiments. Major emphasis on the tests and measurements used to analyze imaging systems with minimum information loss.
2 Class Hours, 1 Laboratory Hour
Prerequisite: RAD 210 Radiologic Physics or permission of instructor

RAD 295 Seminar in Radiography — 2 Credits

Preparation of the technical report and its organization for both written and oral presentation. Readings in current literature and journals.
2 Class Hours
Prerequisite: Seniors Year Status

READING AND LEARNING SKILLS

RDG 090 Reading Fundamentals — 0 Credits

A non-credit course involving individual diagnosis of student's reading strengths and weaknesses, and development and implementation of program to upgrade basic skills. Content to vary with individual student.
2 Class Hours, 2 Laboratory Hours

RDG 092 College Preparatory Reading — 0 Credit

An individualized course emphasizing vocabulary expansion, inferential and critical comprehension, and flexible rate. Instruction and practice of reading skills to specific content areas.
2 Class Hours, 2 Laboratory Hours

RDG 094 College Vocabulary Skills — 0 Credit

Designed to provide students with several methods of mastering vocabulary encountered in college courses. Students will review dictionary skills. Learn to infer meanings from context, structural analysis, and methods of studying vocabulary for examinations. In-class practice will be designed to fit students individual needs.
2 Class Hours, for 8 Weeks **Course starts at beginning of third week of semester**

RDG 095 Language Arts for the Hearing Impaired — 0 Credit

The course is an individualized language arts program for hearing impaired students who do not possess college level English language skills. Focus is on integrating all aspects of the language arts in order to enable the students to more effectively comprehend and use the English language. Materials used will include college textbooks, periodicals, short fiction and film.
3 Class Hours, 3 Laboratory Hours

NOTE: RDG 090, 092, 094, and 095 have strict attendance requirements, whereby students may be deregistered from the class for poor attendance This deregistration may result in a loss of financial aid. Consult course outline and/or instructor for further details.

RDG 100 College Reading — 0 Credits

An individual course emphasizing vocabulary expansion, inferential and critical comprehensive, and flexible rate and practice in the application of reading skills to specific content areas.
2 Class Hours, 2 Laboratory Hours

RDG 110 Efficient Reading — 1 Credits

Development of skills characteristic of the mature reader. Examination of structure of material, emphasis on identification of purpose, flexibility of rate.
2 Class Hours, for 10 Weeks **Course starts at beginning of third week of semester**

RDG 120 Critical Reading — 3 Credits

Emphasis is on critical reading and thinking skills. Students will analyze and evaluate college level readings beyond the literal level. Critical thinking skills will also be applied to the mastery of content area text material.
3 Class Hours

All of the following LRS courses are limited-credit activities for students wishing to enhance various study skills:

LRS 101 Study Management — ½ Credit

General principles of academic success, relationship of outside work and study, scheduling and organizing time, study and concentration. Students will construct a working study schedule.
3 Class Hours, for 3 Weeks *

LRS 102 Memory and Exams — ½ Credit

Theories of memory. Methods of review, strategies for taking essay and objective examinations
3 Class Hours, for 3 Weeks *

LRS 103 Textbook Mastery — ½ Credit

Use of College textbooks as study aids, principles of effective text reading, text study systems. Extensive application of these principles in the student's own textbook.
3 Class Hours, for 3 Weeks *

LRS 104 Listening and Notetaking — ½ Credit

Examination of organizational patterns as they exist in oral communication. Exploration of systems on notetaking, and application of systems to student's own lectures and notes.
3 Class Hours, for 3 Weeks *

*** Students may register for any of these modules anytime before the twelfth week of the semester**

LRS 105 Learning Skills — 2 Credits

General principles of academic success, including scheduling and organizing time, improving concentration and memory, strategies for taking exams and class notes, and the efficient use of college textbooks.
3 Class Hours, for 12 Weeks **Course starts at beginning of third week of semester**

LRS 106 Vocabulary Improvement — ½ Credit

This course is designed to provide students with several methods for dealing with unfamiliar words they might encounter in their college courses. Students will learn dictionary skills, meanings in context, and structural analysis and learning methods for studying college level vocabulary for tests. In class practice will be designed to meet the student's individual needs.
3 Class Hours, 5 Weeks

LRS 110 The Research Paper — 1 Credit

Shaping the Paper: Development of a topic, location of appropriate resources and digestion of the material. Writing the Paper: Outlining effective composition and proper form. A hands-on approach in which students actually research a topic and compose a term paper.
2 Class Hours, for 8 Weeks **Course starts at the beginning of the fifth week of semester**

LRS 120 The Art of Thinking — 1 Credit

Logic as an art. Logical principles taught in imaginitive ways to achieve understanding. Emphasis on the practice of reasoning. Fundamental logic rules are taught as tools to enable the students to gain experience and confidence in thinking about issues that are important to them.
2 Class Hours, for 8 Weeks **Course starts at the beginning of the fourth week of the semester**

LRS 140 Introduction to Dental Hygiene — 0 Credits

This course is designed to provide students with an introductory background in oral anatomy, dental terminology and personal oral hygiene. Additional topics will be covered to assist students with a better understanding of life as a student dental hygienist and a graduate dental hygientist.
1 Class Hour, 4 Laboratory Hours

SIGN LANGUAGE

HUS 120 Basic Sign Communication I — 3 Credits

Introduction to conversationally relevant signs, fingerspelling, grammatical sign principles, and background, cultural, and linguistic information related to deaf people and sign language. The Direct Experience Method is used to help student learn to sign by experiencing the use of signs directly. Some emphasis is on non-manual communication (Visual training, gestures and mime are used to help develop a comfort level for using face, hands and body for communication purposes). Approximately 400 signs are introduced.
3 Class Hours

HUS 220 Basic Sign Communication II — 3 Credits

Review of Basic Sign I. Expressive and receptive fingerspelling as well as recall of vocabulary. Sign vocabulary is further organized around basic conversational topics and questions. Sign grammatical principles are expanded and practiced. Approximately 300 signs are introduced.
3 Class Hours
Prerequisite: HUS 120 Basic Sign Communication I

HUS 230 Basic Sign Communication III — 3 Credits

Additional and expanded topics for conversation are introduced with the associated vocabulary. Variations of signed messages by incorporating different sign principles and mime. More emphasis on conversational fluency in sign. The student will be able to generate increasingly more complex signing structures. Approximately 300 additional signs are introduced.
3 Class Hours
Prerequisite: HUS 120 Basic Sign Communication I

SOCIAL SCIENCE (INTERDISCIPLINARY)

SOS 120 Science Technology and Society — 3 Credits

A study of the interaction of the forces of science and technology with contemporary society, such as government, industry, family, education and organized religion. In addition, students examine the major views (utopian optimist vs. dystopian pessimist) on our contemporary scientific technology. Examine such current topics as recombinant DNA research, computers, nuclear weapons, nuclear power, Star Wars, etc.

SOS 125 Global Security or Nuclear Armageddon: Nuclear Weapons and the Prospects for Human Survival — 3 Credits

Short history of the development of nuclear weapons and the first atomic war. Actual and theoretical effects of nuclear weapons on human beings, organized societies and the environment. Threat of nuclear war in the immediate future, efforts at nuclear arms control and nuclear disarmament, possible security alternatives to nuclear weapons.
3 Class Hours

SOS 126 War, Peace and a Just World Order — 3 Credits

Is war the product of our nature or our nurture? Is the war system an inherent part of the nation state system? Can war be controlled or eliminated in the existing world? If not, on what shape and form will a new world have to be based? How will it be brought into being? These questions and related issues will be addressed as we ponder the prospects of war, peace and a just world order as humanity enters the 21st Century.
3 Class Hours

SOS 128 The Battle of Gettysburg: It's Impact on American Society — 1 Credit

A survey of the structure and the interrelationships of selective issues in American society. The approach is socio-historical, with an attempt to integrate the major theories and techniques of socio-historical analysis as applied to issues of historical interest relative to a pivotal Civil War battle. Of special interest will be a critical analysis of the decision-making process and the importance of civic responsibility in as much as it relates to the events leading up to the battle, the strategy of the conflict and the anticlimatic aftermath.

SOS 130 Man, Technology and Environment — 3 Credits

Biological, economic, and political dimensions of the environmental crises. The conditions created by population growth, a rising standard of living, the increased demand on natural resources, and the advance of technology. Alternative strategies to deal with pollution and energy problems.
3 Class Hours

SOS 146 Introduction to Gerontology — 3 Credits

Multidisciplinary analysis of the bio-psychological characteristics of older persons. Examinations of major issues and dynamics involved in the process of growing old.
3 Class Hours
Prerequisite: PSY 110 General Psychology or permission of instructor

SOS 150 Introduction to Human Service Work — 6 Credit †

Treatment modalities, goal planning, facility usage, counseling, helping skills, principles of human development, etiology, normalization, detection. Institutionalization effects, empathy training, evaluation, problem solving, transactional skills, theoretical systems. ethical issues. Psychoactive drugs, habilitative and rehabilitative programs, community services.

† Credit available only to those who complete successfully a certified institution-based training program and credit is only applicable toward the Associate in Science degree in the Liberal Arts Division's Mental Health and Retardation Emphasis. Credit cannot be used to fulfill other social science requirements.

SOS 155 Media and Society — 3 Credits

An in depth examination and analysis of the impacts and effects of the mass media upon society and the converse societal influences upon the media. Includes such issues as media concentration, portrayal of violence, stereotyping, the public's right to know, among others.
Prerequisite: COM 100 or SOC 110

SOS 160-169 Case Studies in Ethnicity

A sociological analysis of the origins and experiences, the cultural patterns and social relationships of Americans from various ethnic backgrounds.

SOS 160 The Italian American — 1 Credit

Deals with Italian Americans as an attempt to focus on ethnic groups and their persistent impact.
1 Class Hour

SOS 170-179 Contemporary Cultures

Studies in comparative cultures featuring social, political, ecomonic, literary/ artistic detail. The United States and at least one foreign culture compared and contrasted as a means of gaining insight into and understanding both.

SOS 170 United States and the Mideast — 3 Credits

Examination of the cultural and political dimensions which underlie current U.S.-Middle East relations and conflicts both internal and external to the region. Historical perspective on comparative cultures and value systems. Political and cultural differences. Energy security, strategic importance to the U.S., and the Arab-Israeli conflict, the Gulf States , Egypt, Turkey, Iran.
3 Class Hours

SOS 220 Post-Industrial Civilization: Honors Seminar — 4 Credits

Study of the planet as an independent unit facing the challenge of survival with hemispheric differences between "post-industrialized" and "non-industralized" societies. Interconnections between economic, political, social systems with varying values and traditions. Major works in studies of the future examined for possible answers to such basic survival questions as problems of population, production and distribution of food, energy and other essential resources, ultimate difficulties of pollution and waste disposal.
4 Class Hours

SOS 275 Honors Internship Seminar — 3 Credits

Opportunity for Liberal Arts honor students to have a work experience in the professional field in which they plan to major, as they intern in Broome County Government or non-profit human services agencies.
1 Class Hour, 8 Practicum Hours

SOS 288 Seminar in Community Social Service Organizations — 3 Credits

Study of federal, state and local agencies, their functions, limitations and interrelationships. Emphasis on determining the structure and purpose of an agency as related to delivery of human services. A beginning, working knowledge of how to integrate human service skills into over-all activities in the field will be provided. Weekly field work in a selected agency required.
2 Class Hours, 2 Laboratory Hours
Prerequisite: 6 Credits in Psychology or Sociology, 3 of which may be taken concurrently

SOS 290 Social Science Field Experience — 3 Credits

Introduction to the practical issues of the "helping relationship" and an understanding of agency operations. Each student to spend a minimum of 90 hours working in community social and educational agencies. Weekly seminars, outside reading and written reports are required. During the seminars specific helping techniques such as facilitating, goal-setting, reinforcing and supporting will be analyzed.
1 Class Hour
Prerequisite: 3 Credit hours in psychology or sociology plus completion of or concurrent enrollment in 3 additional credit hours in either of these areas.

SOCIOLOGY

SOC 110 Introduction to Sociology — 3 Credits

Sociological facts and principles dealing with the scientific study of human relationships. Emphasis on analysis and study of culture and human society, socialization, groups and group structures. Satisfaction, collective behavioral patterns and the concept of social institutions. Initial experiences for students who desire an introduction to the sociological perspective.
3 Class Hours

SOC 111 Social Problems — 3 Credits

The sociology of social and urban problems. Topics may include crime, population, inequality, discrimination, mental illness, attitudes toward work, social control and the dynamics of social change. Students should be aware that individual instructors approach these problems in different ways, depending on students' needs and instructors' interests. SOC 110 Introduction to Sociology is recommended as an initial experience.
3 Class Hours

SOC 120 Ethnic Groups — 3 Credits

Survey of the structure and interrelationships of selective ethnic minority groups. The approach is socio-historical, with an attempt to integrate the major theories and techniques of sociological analysis as applied to issues of ethnic concern.
3 Class Hours

SOC 140 Working Changes and Choices — 3 Credits

The central theme of this course is the examination through historical and contemporary experiences of work in evolving environment of change that ushers in difficult and varied choices. Its implication is that peoples' attitudes, and not conditions by themselves, are responsible for such change. The course format is non-traditional: it includes about three class meetings, two open-book take-home (to be mailed) tests, and one critical book review. Students must be self-motivated and meet deadlines established in conference with the course instructor.

SOC 210 Crime and Deviant Behavior — 3 Credits

The theoretical aspects of deviance as crime, variations in crime rates, the social and psychological causes of crime, other deviant behavior and the salient research discoveries in these areas. Specific areas within criminology will be reviewed from a multidisciplinary approach to permit as broad an understanding of the problem as possible.
3 Class Hours
Prerequisite: SOC 110 Introduction to Sociology

SOC 230 The Family/Marriage and its Alternatives — 3 Credits

Social and personal factors which make for adequate family functioning, the forms the family takes, its internal processes and the functions it serves in society. Covers systematically the important theoretical and experimental ground on those issues relevant to both the scholarly and practice-minded student.
3 Class Hours
Prerequisite: SOC 110 Introduction to Sociology

SOC 299 Independent Study — 1-3 Credits

An individual student project in sociology which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisite: 3 Semester Hours in Sociology

SPANISH

PLACEMENT IN LANGUAGE - Generally, one year of high school foreign language is equivalent to one semester in college. Students with two years of a language in high school should register for intermediate level courses.

SPA 101, 102 Beginning Spanish — 4, 4 Credits

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Reading and discussion of graded literary and cultural texts.
4 Class Hours
Prerequisite: SPA 101 Beginning Spanish for SPA 102

SPA 201 Intermediate Spanish I — 3 Credits

Intensive review and continuation of grammar and syntax. Intensive and extensive reading of literary works of recognized authors. Aural comprehension and oral practice in the classroom.
3 Class Hours
Prerequisite: SPA 102 Beginning Spanish

SPA 202 Intermediate Spanish II — 3 Credits

Intensive and extensive reading of literary works of recognized authors. Classroom discussion and conversation based on these texts, in the language.
3 Class Hours
Prerequisite: SPA 201 Intermediate Spanish I

SPA 203, 204 Spanish in Conversation and Composition Through Literary Works — 3,3 Credits

The Spanish language in conversation and basic composition practice through the reading of various literary works. Dialogues and scenes, either of original student creation or of published works.
3 Class Hours
Prerequisite: SPA 202 Intermediate Spanish II or its equivalent for SPA 203,SPA 203 Spanish in Conversation and Composition Through Literary Works for SPA 204

SPEECH

SPK 102 Effective Speaking — 3 Credits

Speech communication through voice, words, and action. Voice production, diction, platform presence. Organization of ideas. Practice in presenting speeches of different types.
3 Class Hours

SPK 203 Advanced Speaking — 3 Credits

Designed so that students can review what they have learned in SPK 102 Effective Speaking, learn advanced techniques for informative and persuasive speaking, learn techniques for special speaking occasions. Involvement in a debate as a means of perfecting research techniques, impromptu speaking skills, and the processes of logical thinking and organizing.
3 Class Hours
Prerequisite: SPK 102 Effective Speaking

SPK 299 Independent Study: Speech — 1-3 Credits

An individual student project concerned with advanced work in a specific area of speech. Conducted under the directions of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: 3 semester hours of college level work in Speech

THEATER

THR 101 Theater Appreciation — 3 Credits

Art of the theater to increase understanding and appreciation of drama. A cultural approach considering the interrelationship of all aspects of production including plays, acting, directing, costume, make-up and lighting. Attendance at local productions. (Students taking this course may also be interested in LIT 230 American Drama, LIT 233 World Drama.)
3 Class Hours

THR 109, 110 Practicum in Theater Design and Technology — 3, 3 Credits

Stage design (both lighting and scenic) and construction techniques are studied first hand, as students participate in actual production of two plays each semester. Problems encountered during a production are analyzed. Individualized instruction is increased as students begin to focus on their particular areas of interest.
3 Class Hours each

THR 111 Acting: External Style — 3 Credits

Fundamental acting techniques. Development of individual skills and disciplines relative to external acting techniques. Use of face, voice and movement.
3 Class Hours

THR 112 Acting: Internal Style — 3 Credits

Intensive application of acting techniques through scene study and performance. Problems of character analysis, internal acting and style.
3 Class Hours.

THR 117 Creative Dramatics — 3 Credits

Fundamentals of creative dramatics, its use in teaching, recreation and rehabilitation. Introduction to techniques used and practical application opportunities.
3 Class Hours

THR 151 Theater Production I — 3 Credits

Classroom and workshop study relative to production of plays, including historical and dramatic perspective. Script analysis, play selection, audience research, publicity, administration of a theater.
3 Class Hours

THR 152 Theater Production II — 3 Credits

Classroom and workshop training for stage production. Special attention to stage management, operation of stage crews, house management. Coordination of visiting and touring theater companies regarding production and logistics.
3 Class Hours
Prerequisite: THR 151 Theater Production I

THR 190 Broome Community College Theater — 1 Credit

Students who participate in the plays and performances of the BCC Theater Co. receive one credit per semester. See page 31.

THR 201, 202 Children's Theater — 3, 3 Credits

Touring children's theater company during academic year. Performances at area elementary schools for classtime and assembly programs. Visiting with students pre/post production. Design and construction of costumes, sets, and properties. Analysis of children-oriented plays, development of scripts, rehearsal and performance.
3 Class Hours each

THR 203 Summer Touring Children's Theater Company — 3 Credits

Touring children's theater company during summer. Performances at area recreation centers, parks, camps and playgrounds. Visiting with children pre/post production. Design and construction of costumes, sets, and properties. Analysis of children-oriented plays, development of scripts, rehearsal and performance.
3 Class Hours

THR 218 Role Study and Characterization — 3 Credits

The varied creative processes by which an actor might develop a characterization are studied in theory and explored in practice with emphasis upon screnework.
3 Class Hours

THR 219 Periods and Styles of Acting — 3 Credits

Procedures and techniques necessary for acting in theatrical and period productions such as Elizabethan, Italian Renaissance, Restoration, Absurdist, and innovative styles.
3 Class Hours
Prerequisite: THR 218 Role Study and Characterization or permission of instructor

THR 231 Stage Directing I — 3 Credits

Examination of the perspective of the director in relation to himself, the play the actors, designers, playwright, and the collaborative evolution of the production. Development of directing methods and techniques in terms of casting, pictorial emphasis and harmony, rehearsal and production procedures. Preparation of prompt book and direction scenes. Proscenium and non-proscenium techniques.
3 Class Hours

THR 232 State Directing II — 3 Credits

Detailed analysis of directing in relation to theatrical styles and periods. Examination of the techniques of such directors as Meyerhold, Antoine, Guthrie and Kazan. Direction of pertinent scenes.
3 Class Hours

THR 299 Independent Study: Theater — 1-3 Credits

An individual student project concerned with advanced work in a specific area of theater. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course
Prerequisite: 3 semester hours of college level work in theater

TOOL AND DIE MAKING

TDA 111 Blueprint Reading — 3 Credits

Lines, dimensioning notes. Interpretation of blueprints as used in industry, making plans for operations. Orthographic projection, sketching as related to detail and assembly drawings used in machine shop. Interpretation of drawings of complex parts and mechanisms for features for fabrication, construction and assembly.
3 Class Hours

TDA 113 Survey of Basic Industrial Safety and First Aid — 2 Credits

Work area safety, safe material handling, tool and equipment safety, machinery safeguards, personal protection, electrical safety, hazardous materials and operations, fire prevention, understanding OSHA, first aid.
2 Class Hours

TDA 114 Benchwork — 2 Credits

Description or use of work benches, vices, clamps, hammers, cold chisels. Characteristics of files and filing methods, adjustable and non-adjustable wrenches, twist drills, reamers, broaches, threading taps and dies, hacksaws, contour machines, screw drivers, pliers, shears, surface and height gages, combination sets and automatic punches. Instructions on how to scribe horizontal, vertical, inclined, parallel and perpendicular lines as well as circles and circular areas, cranks, squareness, arms, holes, keyways, templates, cams, sprockets.
2 Class Hours

TDA 120 Precision Measurement and Inspection — 3 Credits

Measuring tools and instruments, simple through complex. Micrometers, verniers, gage blocks, height gages, sine bar, super micrometer, comparators, surface finish comparison, test indicators, toolmakers microscope and optical flats.
3 Class Hours
Prerequisite: MET 113 Engineering Drawing I, MAT 139 Algebra and MET 121 Manufacturing Processes I

TDA 130 Tool Grinding — 2 Credits

Wheel selection and shapes, oil-stones, honing cutting tools, grinding single-point tools, angle calculations, universal grinder, drilling grinding, testing drill points. Grinding milling cutters, clearance grinding, tooth rest, grinding side, shank, angular inserted-blade, and helical cutters. Gear cutters, hobs, reamers, taps, radial and tangential chasers. Grinding carbide tools, grinding internal, slab broaches.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MAT 140 Trigonometry

TDA 132 Statics — 2 Credits

Vectors, their composition and resolution, colinear, coplaner, concurrent and noncurrent force systems, friction, free body diagrams, tension, shear, compression, first moments, centers of gravity, moments of inertia and truss analysis.
2 Class Hours
Prerequisite: MAT 139 Algebra

TDA 140 Production Processes — 3 Credits

Theory and application of multi-operation tooling. Automatic tool changes; numeric and other positioning systems to turning, milling, drilling, broaching, grinding, honing. Production inspection techniques including airgauging, coordinate measuring machines.
3 Class Hours
Prerequisite: MET 122 Manufacturing Processes II

TDA 200 Metallurgy — 2 Credits

Ferrous and non-ferrous alloys including annealing, normalizing, quench hardening, tempering, age hardening, austempering. Hardness testing, microscopic examination of metallic structures, phase modification, phase diagrams, Laboratory exercises to support theory.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MET 121 Manufacturing Processes I

TDA 230 Tool Design — 4 Credits

Introduction to the problems of tool design with emphasis on planning the processes of production, designing and developing the necessary tools, and utilizing available manufacturing facilities. Practical analysis and comparison of the use and cost of tools, jigs and fixtures, dies, molds and gages as they are used in modern manufacturing.
4 Class Hours
Prerequisite: MET 122 Manufacturing Processes II and MAT 139 Algebra

TDA 235 Strength of Materials — 3 Credits

Theory of stress and strain as applied to select engineering materials, particularly important in the design and construction of tools and dies. Studies in tension, compression, shear, flexure, thermal changes in metallic and non-metallic materials.
3 Class Hours
Prerequisite: TDA 132 Statistics

TDA 248 Hydraulics and Pneumatics — 3 Credits

Basic theory of hydraulic and pneumatic systems. Combinations of systems in various circuits, basic designs and functions of circuits and motors, controls, electro-hydraulic servo-mechanisms, plumbing, filtration, accumulation and reservoirs.
2 Class Hours, 2 Laboratory Hours
Prerequisite: TDA 132 Statics

TDA 250 Control Systems — 3 Credits

Hydraulic, pneumatic, mechanical, electrical and electronic control systems and components. Basic description, analysis and explanation of operation. Typical performance characteristics, limitations on performance accuracy, applications and their utilization in industrial processes.
3 Class Hours
Prerequisite: MET 122 Manufacturing Processes II and TDA 248 Hydraulics and Pneumatics

TDA 261 Introduction to Quality Control and Inspection — 3 Credits

Introduction to inspection devices and practices. Basic statistical techniques as they relate to the use of control chart sampling plans and related quality control procedures.
3 Class Hours
Prerequisite: MAT 139 Algebra

TRAVEL AND ENTERTAINMENT

TAE 100 Introduction to Travel & Tourism — 3 Credits

History and growth of tourism. Principles, practices, and philosophy of tourism. Current trends, social and economic contributions of the travel industry.
3 Class Hours

TAE 116 Travel and Tourism I — 3 Credits

A detailed analysis of major travel modes and facilities including motels, hotels, restaurants, resorts, car rentals, and travel agencies. Domestic and international emphasis. Introduction to the Sabre System.
3 Class Hours

TAE 216 Travel and Tourism II — 3 Credits

Travel and tourism operations, use of reference sources, interviewing, development of itineraries, ticketing, regulation, and calculation of costs. Emphasis is placed on communication both in person and by phone. Work on the Sabre System.
3 Class Hours
Prerequisite: TAE 116 Travel and Tourism I

TAE 290 Travel and Tourism Practicum — 3 Credits

An opportunity to develop itineraries, practice interviewing and provide client services. Special emphasis will be placed on travel in the northeast region of the United States. Guest speakers and day or overnight tours are included when possible. The Sabre System will be used when possible.
3 Class Hours
Prerequisite: TAE 116 Travel and Tourism I. For night school students, it is suggested that TAE 216 be taken before this course.

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A.A.S., Broome Community College
B.P.S., SUNY Empire State College
M.A., SUNY at Binghamton

REGISTRAR'S OFFICE
JO VAN WELY, Registrar.
B.A., George Washington University
M.S., Boston University
ROSEMARY ZINNER, Asst. Registrar
A.A.S., Broome Community College
B.S., SUNY at Binghamton

SPECIAL CAREER PROGRAMS
FRANCIS J. SHORT, Chairperson
A.A., Broome Community College
B.A., SUNY college at Geneseo
M.S., SUNY at Albany

STUDENT ACTIVITIES
To Be Announced

STUDENT AFFAIRS
JOHN J. PIEROG
Vice-President
B.S., M.Ed, Plymouth State College
Ed.D, Nova University
BARBARA KANE LEWIS
Assistant to the Vice President for Student Affairs
A.A.S., SUNY at Alfred
B.A., Empire State College

ADJUNCT FACULTY
The following taught or worked part-time at the College during the 1986-87 academic year:

ACADEMIC ADVISING
See Student Academic Advisement Center

ADMISSIONS

AUDIO-VISUAL
Michelle Perricone/Graphic Designer

BIOLOGY
David Grise
Judith Sullivan
Sandra Whittaker

BUSINESS
Annamary Allen
Gerald Casey
Raymond Coury
William Condie
Charles Ducar
Ronald Finch
Joseph Flanagan
Elwood Forester
Sally Gillespie
Eugene Giovannini
Gerald Hlopko
Jerry Knebah
Salvador Julian
Frederick Malloy
William Maney
John Monigan
John Moses
Edward Petras
Raymond Rogers
George Shea
Harry Thor
Lori Wahila
Dennis Walker
Jo Van Wely

CAD/CAM CENTER
(Computer Aided Design/Computer Aided Manufacturing)
Jessie Brown

CIVIL ENGINEERING TECHNOLOGY
Richard J. Polizatto
Donald Brown

COMPUTER STUDIES
Jennifer Cepecla
April Feduke
Sondra Foreman
Robert French
John Glaize
Carl Kusnick
Fiona McFadden
Richard Panko
Katherine Smith
Ruth Swezey
Gary Wood

CRIMINAL JUSTICE
C. Scott Bowen
Louis Crosetto
Paul Dinardo
Kevin Dooley
Stephen Vizvary

DENTAL HYGIENE
Kathleen Case, RDH
Paula Fitch, RDH
David Payne, DDS
Carole Stanley RDH

DIETARY MANAGER
Judy Komarinetz, RD Coordinator
Karen Hojsik, RD
Susan Smith, RD
Jeanne Stracuzzi, RD

EARLY CHILDHOOD
Marilyn J. Schafer, Coordinator
Lois Blake
Sonya Brown
Darlene Darrow
Diana Good
Laurie Henderson
Libbie Hobart
Winifred McDuffie
Marion McPheeters
Peggy Naismith
Barbara Nilsen
Barbara Reining
Maryann Samsel
Marcy Swartz

ELECTRICAL ENGINEERING TECHNOLOGY
William S. George
Sherry E. Gruber
Stephen Gruber
Salvator Pisciotta
Edware Troicke

ENGINEERING SCIENCE AND PHYSICS
Marilyn Akins
Robert Albert
Naomi Bloom
Sally Giuffrida
Rosann Rayome - Goldblatt
Bruce Oldfield
Walter Wintsch

ENGLISH
Victoria Belenkaya
Sean Brady
Peter Christensen
Margaret Deys
Anita Doll
Michael Gee
Kathleen Greenman
Helen Kolias
James Lieberman
Margeret LoGalbo
David Maslar
Jerald Mirskin
Katherine Ottaway
Donald Philips
Madeline Robinson
Gregory Saraceno
Peter Sherburn-Zimmer

FIRE PROTECTION TECHNOLOGY
Anthony Winkler, Jr., Coordinator
James Ryan

HISTORY AND SOCIAL SCIENCES
Robert Chase
Corrine Crandell
Carl Dassbach
John Dempsey
Lorenz Firsching
Maribeth Palmer
Robert Shields
Michael Sullivan
Glen Van Warreby

HUMANITIES
Richard Barons
Alan Crabb
Dennis Curatolo
Francia Espinosa
Martha Fenty
Suzanne Geoghegan
Sherri Hicks-Glover
Lola Kaminsky
Martha Knowlton
Joan Koster
Patrick O'Neil
Helan Sacco
Carole Stanley
John Slyvanus
John Young

LEARNING ASSISTANCE CENTER
Mary Lou Raykovicz

MATHEMATICS
Richard Bishop
Thomas Boyuka
Jane Colapietro
Linda Daly
Joan Dodway
Joseph Donnelly
Nancy Eldred
Georgiann Galant
Elaine Girnis
Michael Iannone
Patricia Livermore
John Nardocci
Ellen Petrisko
Melanie Streenstrup
Mary Wolyniak
Ping Yen

MECHANICAL ENGINEERING TECHNOLOGY
Stephen Brownell
John Bruce
Laimons Drupa
Louis Evangelisti
David Hagerman
Ronald Majka
Irvin Simser
Lowell Williams
Robert Zielewski

MEDICAL ASSISTANT
Lynn Augenstern, B.S., C.M.A.

MEDICAL LABORATORY TECHNOLOGY
Sharon Sickles
Sandra Whittaker

NURSING
Caroline Dimas
Beverly Hugo
Margaret Manley
Judith Quaranta
Elanor Smith
Deborah Stone
Roseann Sullivan

OFFICE TECHNOLOGIES
Patricia Boyes
Robert Lane
Susan Morrelino
Margaret Turna

PARALEGAL ASSISTANT
Matthew Vitanza, Coordinator
Daniel Casella
Nelson Migdal
Michael Wright
Harvey Shapiro

PHYSICAL EDUCATION
Cheryl Brozost
Thomas Carter
Roselle Illsley
Nathaniel Jackson
Nancy Kendrot

RADIOLOGIC TECHNOLOGY
Dorothy Darrin, R.T. (R)
Linda Dean, R.T. (R)
Pamela Hoffman, R.T. (R)
Elizabeth Pell, R.T. (R)
Paula Ryan, R.T. (R)
Mardelle Vest, R.T. (R)

STUDENT AFFAIRS

TOOL AND DIE MAKING
Roy Taylor
Vincent Taylor
Billie Vest
Richard Vlasak
Gary Wiesing

TRAVEL AND TOURISM
To Be Announced

CLINICAL AFFILIATE FACULTY

MEDICAL ASSISTANT
Brenda Brink, C.M.A.
M. Ellen Donovan
Kathy Frost, C.M.A.
Bea Grace, R.N.
Cynthia Kaufman, C.M.A.
David Lashier
Barbara Lidestri, S.P.H.N.
Pauline Patterson, L.P.N.
Jean Paul, L.P.N.
Lorraine Paushter
Loretta Spinelli, C.M.A.
Amy Traver, C.M.A.
Illa VanFleet
Ron Weiler, R.N.
Louise Williams
Kelly Wollman, L.P.N.

MEDICAL LABORATORY TECHNOLOGY
Barbara Bagan, M.T. (ASCP)
Jeannine Bonhoff, M.T. (ASCP)
Bonnie Burton, M.T. (ASCP)
Angela Carro, M.T. (ASCP)
Carla Chamberlain, M.T. (ASCP)
Stevn Collier, B. Sc.,C. (ASCP)
Marcia D'Amico. M.L.T. (ASCP)
Garabed Fattal, M.D. (ASCP)
Anne Gilfillian, M.T. (ASCP) S.H.
Mary Greene, M.A.,B.L.D. (ABB)
Simon Hirschel, M.D.
Joseph Hull, M.S., C.L.A. (NCA) H.
Kenneth Hull, B.S.
Alzina Johnson, M.T. (ASCP)
Stanley Konopka, Ph.D.
Z.J. Kuczala, B.S.
Bernice Lewis, M.T. (ASCP)
James Lockwood, M.T. (ASCP) SH
Irene Moon, M.T. (ASCP)
Theresa Murphy, M.T. (ASCP)
James Parsons, M.T. (ASCP), C.L.S. (NCA)
Linda Redmond, M.S., M.T. (ASCP)
Linda Runne, B.S., M.L.T. (ASCP)
Evyln Thomas, B.S.
William Trolio, M.B.A., M.T. (AMT), C.L.S. (NCA)
Robert Tuggey, Ph.D.
Patricia Walsh, M.S., M.T. (ASCP)
John Walters, B.S.
Janis Williams, M.T., (ASCP) S.M.
Lyla Wolford, M.T. (ASCP) S.C.
Loren Wolsh, M.D.
Lynn Woodward, M.T. (ASCP)

MEDICAL RECORD TECHNOLOGY
Sue Bice, A.R.T., B.A.
V. Jane Casamento, A.R.T., B.S.
Dorothy Erney, R.R.A., B.S.
Margaret Gallagher, A.R.T.
Mary Jo Bowie, R.R.A., B.S., A.R.T., A.A.S.
Cathy Komblatt, A.R.T., A.A.S.
Marlene Okoniewski, A.R.T., A.A.S.
Sandra Thompson, A.R.T., A.A.
Uma Varma, A.R.T., A.A.S.
Mary Wargo, A.R.T., A.A.S.
Lorraine Wheeler, A.R.T., A.A.S.

CURRICULUM ADVISORY COMMITTEES

The College's career-oriented curriculums have advisory committees to help maintain an awareness of the changing skill and training needs in the particular fields; establish communication among the college, the community, employers and educational representatives; and advise the College about career curriculums on a continuing basis. These advisory committees are comprised of a cross-section of people involved in each field. Following is the make-up of the respective advisory committees:

DIVISION OF BUSINESS AND OFFICE TECHNOLOGIES

GENERAL BUSINESS

EDWARD ANDREJKO
Binghamton Savings Bank
JOSEPH BALOK
General Electric
RONALD BARBER
Matco Electric Co.
DONALD BEHR
Great Americal Stores
FRANK BERRISH
IBM Credit Union
DAVID CAHILL
Prudential-Bache
FAYE CLAUS
Metrocenter
RUTH GDOVIN
Singer-Link Co.
EDWIN HOGG
Chase Lincoln First Bank
JOHN KANICK
Ketrick Insurance
JOANNE KOCAK
Tri-Cities Communication
ROBERT LINDSLEY
Security Mutual Life Insurance Co.
ANTHONY MAIONE
Vestal, N.Y.
RAYMOND McCORMACK
WBNG-TV
JAMES MC COY
Number 5 Restaurant
BRIAN MC MAHON
McMahon & Blum co.
SCOTT PAKEL
Raymond Corp.
VINCENT PASQUALE
State University of NY at Binghamton
DENNIS WALKER
Lauder & Lauder

OFFICE TECHNOLOGIES

DEBBIE DELUCIA
Binghamton Savings Bank
EVELYN HART
Singer-Link Co.
VIVIAN ROBILLOTTIO
Chernin & Gold, attorneys
BERNARD SETTA
General Electric
RUTH SMITH
WBNG-TV
ANDREA TOTMAN
IBM Corp. in Owego
KAREN TREICHLER
Singer-Link Co.

HEALTH SCIENCES DIVISION

LARRY P. BLEIER, D.M.D.
Periodonist
BECKY DUNHAM, R.D.H.
ARLENE KONUITO R.D.H.
HARRIET MARMILLION, R.D.H.
SUZANNE O'BRIEN, R.D.H.
DAVID PAYNE, D.D.S.
Oral Surgeon
A.J. PERNA, D.D.S.
General Practice
LAWRENCE ROUFF, D.D.S.
Orthodontist
J. MICHAEL WEBER, D.M.D., M.S.D.
Periodontist
LINDA WHITE, R.D.H.

DIETARY MANAGER

LOIS BENTLAGE, RD
Consulting Dietician
Oak Hill Manor Nursing Home
Ithaca, NY
JOSEPH GAY
Dean of Health Sciences
Broome Community College
JOAN M.L. KOCH, RD
Nutritional Sciences
Cornell University
GLORIA ROCKISAK, CDM
Binghamton General Hospital
STUDENT, appointed annually

MEDICAL ASSISTANT

DR. BRUCE BOWLING
Endwell Primary Care Affiliates
LYNN AUGENSTERN, C.M.A.
Broome Community College
TERESSA BURAN, C.M.A.-C.
Broome Community College
MARY CUOMO
Pediatric Services
Wilson Memorial Hospital
M. ELLEN DONOVAN
Medical Assistant
Chenango Bridge Medical Center
JOSEPH GAY
Dean of Health Sciences
Broome Community College
BEA GRACE
Endwell Primary Care Affiliates
DR. MICHAWL LEWIS
Susquehanna Affiliates
KATHLEEN SPOLSKY
Medical Assistant
DR. FREDERICK WHITING
Binghamton, NY
STUDENT, appointed annually

MEDICAL LABORATORY TECHNOLOGY

MAXIMILLIAN BORSKI
Medical Laboratory Technology
Broome Community College
SUSAN DANSER
Alumnus
JOHN FINN
United Health Services
BRENDAN FLYNN
Chemistry Dept.
Broome Community College
JOSEPH GAY
Dean of Health Services
Broome Community College
MARY GREEN
Lourdes Hospital
ROBERT LEVIN
Clinical Pathology Unit
Norwich-Eaton Pharmacal Co.
Norwich, NY
JULIA PEACOCK
Chairperson
Medical Laboratory Technology
Broome Community College
WILLIAM TROLIO
Mary Imogene Bassett Hospital
Cooperstown, NY
DAVID WALSH
Biological Sciences
Broome Community College
JOHN WALTERS
United Health Services
DR. LOREN WOLSH
Chairman, United Health Services
STUDENT, appointed annually

MEDICAL RECORD TECHNOLOGY

V. JANE CASAMENTO, A.R.T.
Director, Medical Records
Chenango Memorial Hospital
DOROTHY ERNEY, R.R.A.
Director, Medical Records
Binghamton Psychiatric Center
JOSEPH K. GAY
Dean of Health Sciences
Broome Community College
CATHY KORNBLATT, A.R.T.
Director, Medical Records
Chenango Bridge Nursing Home
DR. ALFRED PETERSON
Chenango Bridge Medical Group
HAROLD SIEFERT
Vice-President of Finance
Our Lady of Lourdes Hospital
STUDENT, appointed annually

NURSING ADVISORY COMMITTEE MEMBERSHIP

MELISSA BRENNAN, R.N., M.S.N.
Director of Nursing
Our Lady of Lourdes Memorial Hospital

JUDY FRANKLIN, R.N., M.S.N.
Assistant Administrator for Nursing
Willow Point Nursing Home
JOSEPH K. GAY
Dean of Health Sciences
Broome Community College
JEAN KING
Graduate of BCC Nursing Program
JOANN MANIAGO
Consumer of Health Care
SHIRLEY MOEHRING, R.N., B.S.N.
Acting Asst. Commissioner for Home Health Services
Broome County Health Department
JACQUELINE SHRADER
BCC Nursing Faculty
Broome Community College
JUDY ST. JOHN
Guidance Counselor
Windsor High School
JANET WRIGHT
Chairperson, BCC Department of Nursing
Broome Community College

RADIOLOGIC TECHNOLOGY

ANDREW ADAMS, M.D.
Binghamton, NY
Medical Director of Curriculum
Binghamton General Hospital
Department of Radiology
FRANK EMICK, R.T. (R)
DAVID LISI, M.D.
NANCY BUTTON, R.T.
Chairperson, Radiologic Technology Department,
Broome Community College
LEWIS DOSIK, M.D.
Our Lady of Lourdes Hospital
Department of Radiology
PHILIP FRANCIS, R.T. (R)
Our Lady of Lourdes Hospital
Department of Radiology
PATRICIA KINNEY, R.T. (R)
Supervisor,
Our Lady of Lourdes Hospital
Department of Radiology
FRANKLIN MC SHANE
VP of Clinical Services,
Our Lady of Lourdes Hospital
Department of Radiology
EDWIN LIS
Radiology Business Manager,
Wilson Memorial Hospital
BRIAN WETZEL, RT (R)

TECHNOLOGY, ENGINEERING AND COMPUTING DIVISION

CHEMICAL ENGINEERING TECHNOLOGY

JAMES DORSEY
Eastman Kodak
DR. CARL ERNST
Anitec Image Corp.
BARBARA LASKY
NYS Electric and Gas
DR. LOU LIETO
Norwich-Eaton Pharmaceuticals
MICHAEL McDONALD
Corning Glass Works
JOHN SUSKO
IBM Corp.
PATRICIA WEISLANDER
Sandia Corp.
DR. WILLIAM WITTOSCH
International Paper Co.

CIVIL ENGINEERING TECHNOLOGY

DAVIS BURRITT
President
Murray Walter, Inc.
FRANK W. CONNELL
President
McFarland Johnson Engineers, Inc.
JAMES CONNOR
District Engineer
NYS Department of Transportation
Binghamton, NY
WILLIAN LANE
William Lane General Contractors
DENNIS T.O'DEA
NYSEG
GARY WOOD, P.E.
Empire Soils Investigation, Inc.
Groton, NY

ELECTRICAL ENGINEERING TECHNOLOGY

JOHN CZEBINIAK
Universal Instruments
JOHN EKSTROM
NYSEG
CRAIG HOFFMAN
ROBERT NEW
Singer-Link Co.
ROBERT O'CONNOR
General Electric
RICHARD PAINTER
Gould Computer Systems
JOSEPH SVOBODA
BOCES
ELDRED PAUFVE
Universal Instruments
ROBERT PIERDOMENICO
NYSEG
ROBERT ROSE
IBM Corp.
SAMUEL STOKES
General Electric
CHARLES TAYLOR
SUNY at Binghamton
JAMES WALKER
Doron Precision Systems
JACK WHITE
IBM Corporation
GEORGE YEZZI
NYSEG

MECHANICAL ENGINEERING TECHNOLOGY

FRED BARTHOLOMEW
Marketing Services Manager,
Raymond Corporation
LOUIS EVANGELISTI
Supervisor, Drafting Standards
Singer-Link Co.
PETER MAJESTIC
Research & Development
Corning Glass
DAVID MERITHEW
Manager, Mechanical Design
Universal Instruments
RAYMOND PERINE
Vice-President
NYSEG
HERBERT SWAN
Retired
IBM

TOOL & DIE PROGRAM

LEWIS CLARK
E.H. Titchener & Co.
CHET LENCESKI
Broome BOCES
JIM LOTT
IBM Corp.
ART MARKEY
Stow Mfg. Co.
SY MATHEY
Electro Form Corp.
JAMES MC ELHATTEN
Broome BOCES
DINO SPAGNOLLI
NYSEG
ROB TAYLOR
Singer-Link Co.

TRAVEL AND TOURISM

To Be Announced

LIBERAL AND GENERAL STUDIES DIVISION

INTERIOR DESIGN

ANNE COTTEN
Interior Designer and Broome Community College
Adjunct faculty
ROBERT KELLER
Assistant Professor, Art
Broome Community Colege
CORINNE MAXON
Professor, Home Economics
SUNY College at Oneonta
BEVERLY MC LEAN
Designer
LILLIAN NEZELEK
Guidance Coordinator
Binghamton High School

SPECIAL CAREER PROGRAMS

CRIMINAL JUSTICE

FRANCIS SHORT
Department Chairperson
Broome Community College
ROBERT KENT
Broome County Parole Board
HON. PATRICK MONSERRATE
Broome County Judge
DAVID NEMEC
Broome County Probation
JOHN SEJAN
Binghamton Chief of Police
MICHAEL PALMIOTTO
Coordinator, Criminal Justice
Broome Community College

EARLY CHILDHOOD

MARILYN SCHAFER
Coordinator, Child Care
Broome Community College
HELEN BUEMI
Day Nursery Association
ANNE CAMPBELL
Handicapped Children's Assoc.
BARBARA GRIFFEN
Student and Broome County
Child Development Council
LIBBY HOBART
Broome Cooperative Extension
MARIANNE KAYEMBE
Johnson City School Age Program
PAT NASH
Day Nursery Assoc.
NANCY SELIGA
BCC and Childcare Service
BRENDA TESTANI
Little World-St. James Preschool
LOIS WESTGATE
Riverside Drive Nursery

FIRE PROTECTION TECHNOLOGY

ANTHONY WINKLER
1st Assistant Fire Chief
Binghamton, NY
Coordinator, Fire Protection
Technology
NANCY CAMPBELL
BCC Alumna
DAVID DARLING
JEROME FIVES
IBM Corp. in Endicott

PARALEGAL ASSISTANT

MATTHEW VITANZA
Attorney at Law
Coordinator, Paralegal Asst.
Broome Community College
JON BLECHMAN
Attorney at Law
IDA GIANELLA
Surrogate Court
SALLY GILLESPIE
Labor-Management Mediator
HON. JOHN HILLIS
Binghamton City Court Judge
BEVERLY LEGOS
Court of Claims
MADELINE NEMCEK
Scanlon & Vetrano, attorneys
TANYA SCHMELER
Columbian Mutual Life Insurance

OTHER

DEVELOPMENT CENTER FOR BUSINESS

MR. THOMAS W. MAILEY
Cornell University Industry
Research Park
MR. FRANK BERTONI
Security Mutual Life Insurance
MR. THOMAS HENRY
General Electric
MR. WILLIAM KLISH
IBM
MR. CLARE PRICE
Roto-Rooter Sewer & Drain
Cleaning Service
MR. LOU SANTONI
Broome County Chamber of
Commerce
MR. CARL J. WENZINGER, JR.
Doron Precision Systems, Inc.
MR. EDWIN GENT
Gent Engineering
MS. KAREN TREICHLER
Singer-Link
MS. DONNA SINGER
Executive Search Inc.
MR. DAVID JACOBS - Chairperson
Chase Lincoln Bank

VOCATIONAL EDUCATION

M. JEANNE ALLISON
Registered Occupational Therapist
Wilson Memorial Hospital
(Representing Labor)
PETER AUSTIN
Coldwell Banker Real Estate
(Representing Business)
IDA GIANELLA
Deputy Clerk
Broome County Surrogate Court
(Representing Labor)
VIOLET MC HALE
Corporate Secretary
Binghamton Savings Bank
(Representing Business/Labor)
ROBERT NEW
Senior Member Technical Staff
Singer-Link Co.
(Representing Industry)
DINO SPAGNOLI
Personnel Manager
Universal Instruments
(Member at Large)
GERALD TAYLOR
Principal
Chenango Forks Central School
(Representing Secondary Schools)

STATE UNIVERSITY OF NEW YORK (SUNY)

JEROME B. KOMISAR, Acting Chancellor

Broome Community College is one of the 64 colleges that comprises the State University of New York (SUNY), which was established by the State Legislature in 1948. The 64 units include 30 locally-sponsored two-year community colleges like Broome.

The University's 64 geographically dispersed campuses bring educational opportunities within commuting distance of virtually all New York citizens. In academic 1986-87 more than 370,000 students enrolled in its classrooms or pursued study at home, at their own pace, through such innovative institutions as Empire State College, a campus without walls. Of the 370,000, about 30 percent are 24 years of age or older.

The University is uniquely organized into a system comprised of:

Four University centers, two medical centers, 12 colleges of arts and sciences, a non-residential college, four specialized colleges, five statutory colleges, six agricultural and technical colleges, and 30 locally-sponsored community colleges.

In addition to baccalaureate studies, 12 of the senior campuses offer graduate study at the doctoral level, and 22 at the master's level.

The two-year colleges offer associate degree opportunities in a wide range of technical areas. They also provide transfer programs for students wishing to continue to the baccalaureate degree. In the 1986-87 college year, the community colleges enrolled about 180,000. This number is about equally divided into full-time and part-time categories. Ten educational Opportunity Centers serve the educationally deprived by upgrading occupational skills for more gainful employment and identifying students with college potential to prepare them for enrollment in the state's public and private colleges.

State University is governed by a Board of Trustees, appointed by the Governor, which determines the policies to be followed by the 34 State-supported campuses. The 30 community colleges operate under the program of State University and have their own local boards of trustees. SUNY's motto is "To Learn-To Search-To Serve" which emphasizes the three-fold mission of education, research and public service.

State University awarded a degree to its one millionth graduate in the spring of 1985. The majority of them are pursuing their careers in communities across the state.

COLLEGE OF THE STATE UNIVERSITY OF NEW YORK (SUNY)

COMMUNITY COLLEGES

(Locally-sponsored, two-year colleges under the program of State University)

Adirondack Community College at Glens Falls
Broome Community College at Binghamton
Cayuga County Community College at Auburn
Clinton Community College at Plattsburgh
Columbia-Greene Community College at Hudson
Community College of the Finger Lakes at Canandaigua
Corning Community College at Corning
Dutchess Community College at Poughkeepsie
Erie Community College at Williamsville, Buffalo, Orchard Park
Fashion Institute of Technology at New York City
Fulton-Montgomery Community College at Johnstown
Genesee Community College at Batavia
Herkimer County Community College at Herkimer
Hudson Valley Community College at Troy
Jamestown Community College at Jamestown
Jefferson Community College at Watertown
Mohawk Valley Community College at Utica
Monroe Community College at Rochester
Nassau Community College at Garden City
Niagara County Community College at Sanborn
North Country Community College at Saranac Lake
Onondaga Community College at Syracuse
Orange County Community College At Middletown
Rockland Community College at Suffern
Schenectady County Community College at Schenectady
Suffolk County Community College Selden, Riverhead, Brentwood
Sullivan County Community College at Loch Sheldrake
Tompkins Cortland Community College at Dryden
Ulster County Community College at Stone Bridge
Westchester Community College at Valhalla

* The Health Sciences Centers at Buffalo and Stony Brook are operated under the administration of their respective University Centers

** While authorized to offer such baccalaureate and master's degree programs as may be approved pursuant to the provisions of the Master Plan, in addition to the associate degree, the Fashion Institute of Technology is financed and administered in the manner provided for community colleges

*** These operate as "contract colleges" on the campus of independent universities.

STATE-OPERATED COLLEGES

UNIVERSITY CENTERS

State University at Albany
State University at Binghamton
State University at Buffalo
State University at Stony Brook

COLLEGE OF ARTS AND SCIENCE

Empire State College
State University College at Brockport
State University College at Buffalo
State University College at Cortland
State University College at Fredonia
State University College at Geneseo
State University College at New Paltz
State University College at Old Westbury
State University College at Oneonta
State University College at Oswego
State University College at Plattsburgh
State University College at Potsdam
State University College at Purchase

COLLEGES AND CENTERS FOR THE HEALTH SCIENCES

Health Sciences Center at Brooklyn
Health Sciences Center at Syracuse
College of Optometry at New York City
(Health Sciences Center at Buffalo) *
(Health Sciences Center at Stony Brook) *

AGRICULTURAL AND TECHNICAL COLLEGES

Agricultural and Technical College at Alfred
Agricultural and Technical College at Canton
Agricultural and Technical College at Cobleskill
Agricultural and Technical College at Delhi
Agricultural and Technical College at Farmingdale
Agricultural and Technical College at Morrisville

SPECIALIZED COLLEGES

College of Environmental Science and Forestry at Syracuse
Maritime College at Fort Schuyler
College of Technology at Utica/Rome
Fashion Institute of Technology at New York City **

STATUTORY COLLEGES ***

College of Agriculture and Life Sciences at Cornell University
College of Ceramics at Alfred University
College of Human Ecology at Cornell University
School of Industrial and Labor Relations at Cornell University
College of Veterinary Medicine at Cornell University

* The Health Sciences Centers at Buffalo and Stony Brook are operated under the administration of their respective University Centers

** While authorized to offer such baccalaureate and master's degree programs as may be approved pursuant to the provisions of the Master Plan, in addition to the associate degree, the Fashion Institute of Technology is financed and administered in the manner provided for community colleges

*** These operate as "contract colleges" on the campus of independent universities.

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NOTES

NOTES

APPROVED CALENDAR
1987 - 1988 ACADEMIC YEAR

Fall

Registration	August 24 - 27
Classes Start	August 31
Labor Day	Sept 7th no classes
Last Day to Add Courses	September 8
Last Day for 25% Refund and Last Day to Withdraw from a Course with no grade	September 25
Mid Semester Break	October 12 - 13
Mid-Term Grades Due	October 28
Monday Classes (Make up for Labor Day)	November 25
Thanksgiving Break	November 26 - 29
Last Day of Classes	December 19
Reading/Study Day	December 20
Final Exams	December 21-23
Final Grades Due	December 28

Spring

Registration	January 11 - 14
Classes Start	January 18
Last Day to Add Courses	January 22
Last Day for 25% Refund and Last Day to Withdraw from a Course with no grade	February 12th
Mid-Semester Break	Feb. 29 - Mar 7
Spring Break	April 4 - 5
Last Day of Classes	May 10
Reading/Study Day	May 11
Final Exams	May 12-14 & 16
Final Grades Due	May 18
Graduation	May 20







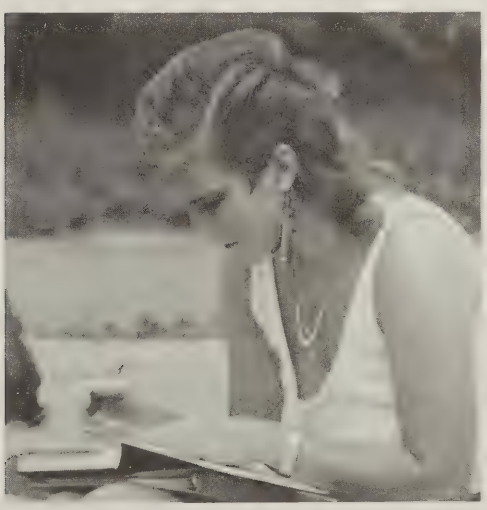
APPROVED CALENDAR
1988 - 1989 ACADEMIC YEAR

Fall

Registration	August 22 - 25
Classes Start	August 29
Last Day to Add Courses	September 2
Labor Day	September 5
Last Day for 25% Refund and Last Day to Withdraw from a Course with no grade	September 23
Mid Semester Break	October 10 - 11
Mid Term Grades Due	October 26
Thanksgiving Break	November 23 - 27
Last Day of Classes	December 19
Reading/Study Day	December 20
Final Exams	December 21 - 23
Final Grades Due	December 28

Spring

Registration	January 16 - 19
Classes Start	January 23
Last Day to Add Courses	January 27
Last Day for 25% Refund and Last Day to Withdraw from a Course with no grade	February 17th
Mid-Semester Break	February 20 - 21
Mid-Term Grades Due	March 22
Spring Break	March 27 - April 2
Last Day of Classes	May 16
Reading/Study Day	May 17
Final Exams	May 18 - 22
Final Grades Due	May 24
Graduation	May 26





BCC
Broome Community College

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 1147 BINGHAMTON, N. Y.

POSTAGE WILL BE PAID BY ADDRESSEE

BROOME COMMUNITY COLLEGE
ADMISSIONS OFFICE
P. O. BOX 1017
BINGHAMTON, N. Y. 13902

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BROOME COMMUNITY COLLEGE
ADMISSIONS OFFICE
P. O. BOX 1017
BINGHAMTON, N. Y. 13902

Date _____

S.S.# _____

Name: _____

Address _____

City _____ State _____

Zip _____ Phone:() _____

H.S. Attended _____

Graduation (Mo./Yr.) _____

Any College Attended? If so, how many credits and at what colleges?

Check the information you would like to receive:

- ☐ Application
- ☐ College Catalog
- ☐ Early Admissions for High School Juniors
- ☐ Education Opportunity Program (EOP)
- ☐ Financial Aid/Scholarship Info.
- ☐ Summer School Info.
- ☐ Testing and College Orientation Info.

Please identify your curriculum interests:

Business
- ☐ Accounting
- ☐ Accounting/Banking Emphasis
- ☐ Business Administration
- ☐ Hotel/Restaurant Management
- ☐ Management
- ☐ Marketing
- ☐ Real Estate
- ☐ Travel & Tourism

Computer Studies
- ☐ Computer Science
- ☐ Computer Technology
- ☐ Data Processing

Health Sciences
- ☐ Dental Hygiene
- ☐ Medical Assistant
- ☐ Medical Lab Technology
- ☐ Medical Record Technology
- ☐ Nursing
- ☐ Radiologic Technology (X-Ray)

Liberal Arts
- ☐ Liberal Arts (A.A.) Majors: Humanities, Social Sciences, Mathematics; Professions:Law, Teaching, Public Service (Transfer)
- ☐ Liberal Arts(A.S.)Majors:Biology, Chemistry, Physics; Professions: Medicine, Dentistry Pharmacy, Physical Therapy (Transfer)
- ☐ Liberal Arts/Early Childhood
- ☐ Liberal Arts/Criminal Justice
- ☐ Liberal Arts/Pre-Forestry
- ☐ Liberal Arts/Mental Health
- ☐ Liberal Arts/Communication and Media Arts

Science and Engineering Technology
- ☐ Chemical Engineering Technology
- ☐ Civil Engineering Technology
- ☐ Electrical Engineering Science
- ☐ Engineering Science
- ☐ Mechanical Engineering Technology

Office Technologies
- ☐ Secretarial Executive
- ☐ Sec/General Office (Certificate)
- ☐ Sec/Office Services Assistant
- ☐ Sec/Word Processing

Special Career Programs
- ☐ Early Childhood
- ☐ Criminal Justice
- ☐ Dietary Manager (Certificate)
- ☐ Fire Protection Technology
- ☐ Individual Studies (A.S.) (Transfer)
- ☐ Individual Studies (A.A.S.) (Job Oriented)
- ☐ Interior Design (Certificate)
- ☐ Paralegal Assistant
- ☐ Paul Smith's College (One + One)
- ☐ Tool and Die Making (A.O.S.)

BCC
Broome Community College

Date information sent: _____

Date _____

S.S.# _____

Name: _____

Address _____

City _____ State _____

Zip _____ Phone:() _____

H.S. Attended _____

Graduation (Mo./Yr.) _____

Any College Attended? If so, how many credits and at what colleges?

Check the information you would like to receive:

- ☐ Application
- ☐ College Catalog
- ☐ Early Admissions for High School Juniors
- ☐ Education Opportunity Program (EOP)
- ☐ Financial Aid/Scholarship Info.
- ☐ Summer School Info.
- ☐ Testing and College Orientation Info.

Please identify your curriculum interests:

Business
- ☐ Accounting
- ☐ Accounting/Banking Emphasis
- ☐ Business Administration
- ☐ Hotel/Restaurant Management
- ☐ Management
- ☐ Marketing
- ☐ Real Estate
- ☐ Travel & Tourism

Computer Studies
- ☐ Computer Science
- ☐ Computer Technology
- ☐ Data Processing

Health Sciences
- ☐ Dental Hygiene
- ☐ Medical Assistant
- ☐ Medical Lab Technology
- ☐ Medical Record Technology
- ☐ Nursing
- ☐ Radiologic Technology (X-Ray)

Liberal Arts
- ☐ Liberal Arts (A.A.) Majors: Humanities, Social Sciences, Mathematics; Professions: Law, Teaching, Public Service (Transfer)
- ☐ Liberal Arts (A.S.)Majors: Biology, Chemistry, Physics; Professions: Medicine, Dentistry, Pharmacy, Physical Therapy (Transfer)
- ☐ Liberal Arts/Early Childhood
- ☐ Liberal Arts/Criminal Justice
- ☐ Liberal Arts/Pre-Forestry
- ☐ Liberal Arts/Mental Health
- ☐ Liberal Arts/Communication and Media Arts

Science and Engineering Technology
- ☐ Chemical Engineering Technology
- ☐ Civil Engineering Technology
- ☐ Electrical Engineering Science
- ☐ Engineering Science
- ☐ Mechanical Engineering Technology

Office Technologies
- ☐ Secretarial Executive
- ☐ Sec/General Office (Certificate)
- ☐ Sec/Office Services Assistant
- ☐ Sec/Word Processing

Special Career Programs
- ☐ Early Childhood
- ☐ Criminal Justice
- ☐ Dietary Manager (Certificate)
- ☐ Fire Protection Technology
- ☐ Individual Studies (A.S.) (Transfer)
- ☐ Individual Studies (A.A.S.) (Job Oriented)
- ☐ Interior Design (Certificate)
- ☐ Paralegal Assistant
- ☐ Paul Smith's College (One + One)
- ☐ Tool and Die Making (A.O.S.)

BCC
Broome Community College

Date information sent: _____

MAP OF THE CAMPUS

1. TITCHENER HALL
Communications/Media Arts
Health Sciences
Liberal and General Studies
Mathematics

2. WALES BUILDING
Admissions Office
Administrative Offices
Alumni Association
Center for Community Education
Counseling and Student Development Center
Educational Technology
Finance Office
Financial Aid
BCC Foundation
Health Service
Office for Sponsored Programs
Registrar's Office
Student Affairs Office
Student Information Center

3. SCIENCE BUILDING
Chemical Engineering Technology
Dental Hygiene

4. CLASSROOM BUILDING

5. STUDENT CENTER
Book Store
Cafeteria
Gymnasium
Little Theater
Physical Education

6. MAINTENANCE BUILDING

7. THE UNION
Housing
Student Activities
Student Lounge

NIMMONSBURG CENTER
Classes are also held at the Nimmonsburg Center, one mile north of the campus on Front Street.

8. MECHANICAL BUILDING
Civil Engineering Technology
Mechanical Engineering Technology
Special Career Programs

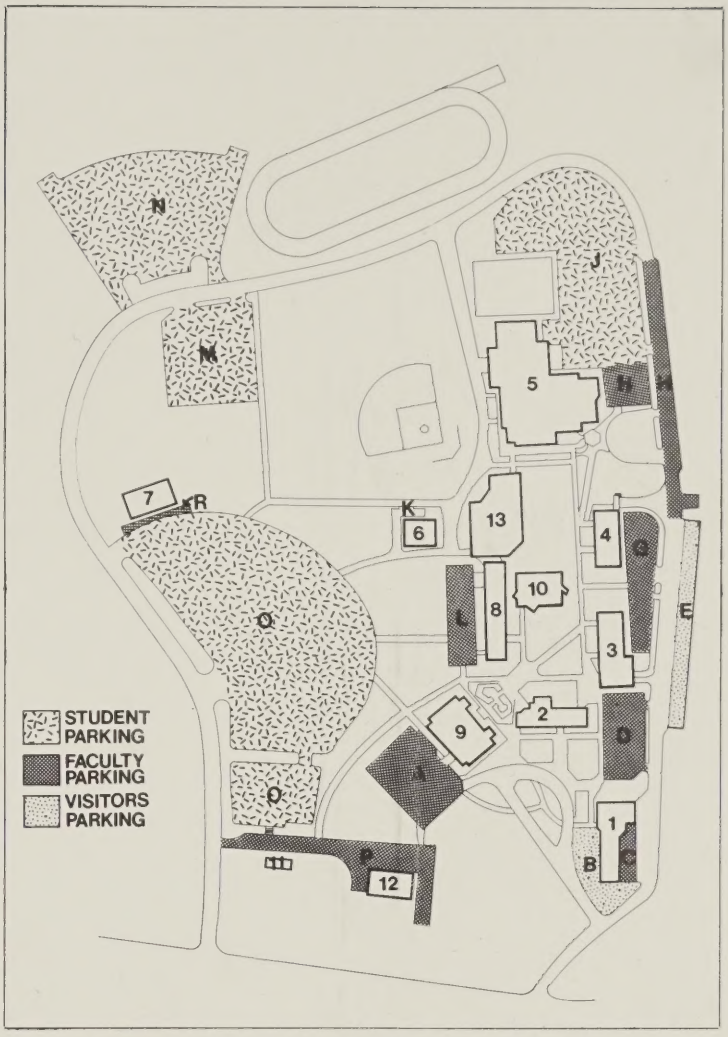
9. CECIL C. TYRRELL LEARNING RESOURCES CENTER
Audio-Visual
Learning Assistance Center
Mathematics
Reading and Study Skills
Writing
Library
Science Learning Center
Student Information Center

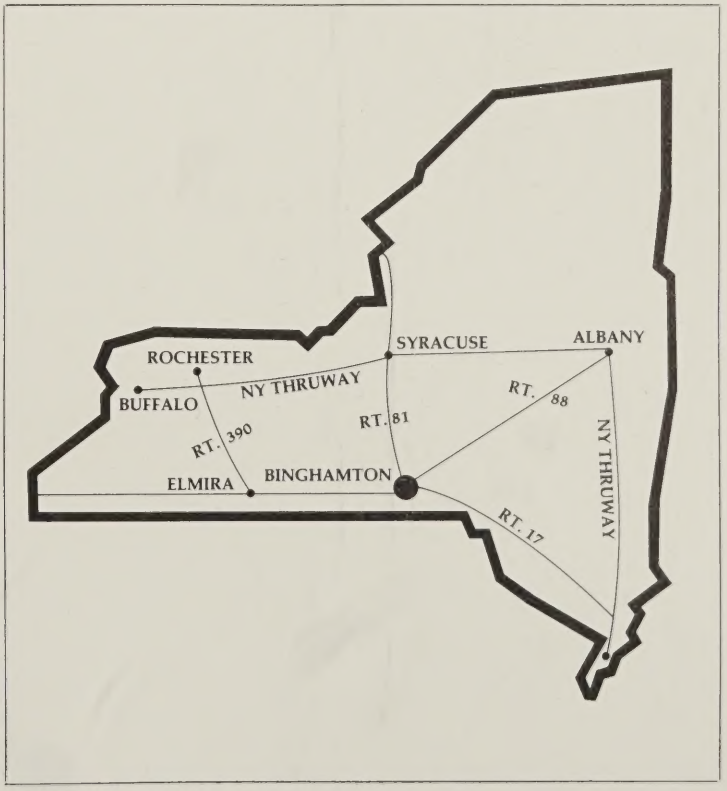
10. BUSINESS BUILDING
Accounting
Business Administration
Computer Center
Hotel/Restaurant Management
Management
Marketing
Medical Assistant
Medical Record Technology
Office Technologies
Radiologic Technology

11. "ALMS HOUSE" BUILDING
Art Studio
Music Studio

12. 901 FRONT STREET
Biological Sciences
Medical Laboratory Technology
Nursing

13. APPLIED TECHNOLOGY BUILDING
Computer Studies
Electrical Engineering Technology
Engineering Science and Physics
Technology, Engineering and Computing Division





Broome Community College


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